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The **SUPER-SAFE HOME** *of the FUTURE*

A moderate priced indestructible small home of reinforced brick masonry, demonstrating the supreme accomplishment of a century's progress in home construction.

All-brick from the footings of the basement walls to the roof, including stairways, floors and partition walls, there is not an ounce of combustible material in it anywhere.

In addition to being absolutely fireproof its heavy reinforcement renders it immune to tornado or earthquake stresses and insures it permanency far beyond the life expectancy of any builder.

Under ordinary conditions in most localities it can be built for not to exceed \$5,000.

Profusely illustrated. Fourteen other house plans.

Price One Dollar

Published by The BRICK MANUFACTURERS' ASSOCIATION of AMERICA,
Guarantee Title Bldg., Cleveland, O.



Andrew N. Rebori, Architect.

The first Super-Safe Home

Plans of the Super-Safe Home are Available.

Architects or others who desire blue prints or structural plans of this reinforced brick masonry house may secure them through the Brick Manufacturers Association of America, Guarantee Title Building, Cleveland, at \$5.00 per set.

The SUPER-SAFE HOME of the FUTURE

By ANDREW N. REBORI, Architect

IT HAS long been recognized that the three basic needs of every individual, without which his actual existence is definitely limited, are food, clothing and shelter. Our prehistoric ancestor found all three with little effort.

A deep cave, with a small entrance covered by a weighty boulder, was ample protection. With the development of civilization man confined himself to limited areas and, by cultivation of foods and the development of defensive weapons, made his existence much easier.

As the instinctive urge of migration and adventure carried him, water borne by wings of wind, to other climes he again encountered need for greater protection against floods, hurricanes, tornadoes and earthquakes; and against *fire*, that valuable but uncontrollable servant of man.

During the past few centuries amazing progress has been made in devising a more complete fulfillment of our expanding desires for refinements in these same basic needs—food, clothing and shelter. Surprising as it may seem, the economic development of family shelter has not adequately kept pace with the rapid progress in other lines of industry.

Only recently have we awakened to a greater need for more adequate "shelter," i. e., for more complete protection in our homes from fire, tornado and earthquake. Formerly, damaging winds seemed confined to tropical areas and the western plains. Of late years destructive winds of hurricane proportions have visited nearly every portion of our own United States including the more heavily populated areas between the Mississippi and the Atlantic.

Severe earthquakes are no longer infrequent over the Pacific Coast states and are sometimes felt in the Southern Atlantic states. And *fire* still exacts an

enormous, but needless, loss of human life and property every hour of the day and night.

Obviously the remedy is more complete "shelter"—by which is meant, homes which actually do give *complete* protection from the age-old destructive forces of *fire, flood, hurricane, tornado* and *earthquake*.

Such a "shelter" is the "Super-Safe Home of the Future," the exhibit of The Brick Manufacturers' Association at A Century of Progress Exposition. It is simply an honest, direct expression in terms of brick, which demonstrates a flexibility of form and usage possible with a building material which is inherently fire-proof and, because of its reinforced construction is safe also against floods, hurricanes, tornadoes and earthquakes.

Brick—from the ground floor to the rooftop; exterior and interior; walls, floors, ceilings, stairs, partitions, fireplace and book shelves. By means of steel reinforcing rods embedded in the mortar of brick masonry, every form of projection possible with reinforced concrete or steel has been achieved—cantilevers, flat beams, overhangs and room-wide spans of floor slabs.

These materials, brick and steel, do not ordinarily make for a more expensive home; in fact they introduce a new element of real economy. For brick is not only a structural material; carrying the full load of walls, floors, partitions, roof and contents of the building itself; but, wherever found, is either a finished material or an economical finishing material.

For illustration—an exterior wall of brick is a finished surface requiring no coating of paint or stucco to complete it. It is complete in itself, most pleasing in appearance and adequately protective. A floor of reinforced brick masonry is not only a safe supporting member but also an economical finishing medium, for at very low cost it may be ground and polished to a finished surface, ready for ordinary floor coverings of rugs or runners, without the expense of wood and paint or varnish.

Protected from the north winds by means of brick masonry walls, the living rooms and bed rooms, each with a balcony above the ground floor, face the south. The ground floor is occupied by the laundry, heating plant and air-conditioning equipment.

The Super-Safe Home as designed is not a stunt. It is basically and fundamentally sound in every sense. The plan is arranged to meet the needs of a small family with one car. It is not a fixed design and may be changed to suit any particular family need. No attempt was made to follow an accepted form or period of house design other than combining a frank expression of brick with a plan orientated for maximum comfort and livability in the location upon which it is placed.

Surely, it is the Super-Safe Home of the Future.

Surprises Delighted You on Every Hand in The Super-Safe House

By HUGO FILIPPI, Engineer of the Super-Safe Home

THE MAGNIFICENT scale, grandeur and educational value of the Century of Progress doubtlessly impressed you. Wherever you went, new features of interest commanded your attention and the arts and sciences were portrayed in an unforgettable manner.

You visited the Housing Group. There in a formal garden, rising high above its neighbors, stood the brick house exhibit of the Brick Manufacturers' Association—beautiful, structurally reliable, permanent and firesafe—an architectural gem designed by one of America's leading architects.

The house was of brick, built in dignified simplicity of style, but what beauty, what a clever blending of brick and mortar colors and what a charming example of the brick masons art it represented. There it stood, surrounded by winding walks of red bricks, mirrored in the reflecting pool to the south, and flanked on all sides by the Garden of the States and of Canada with its benches, flower pots and globe built of multi-colored bricks from many sections of North America. Looking to the east, the house stood framed in the background of the waters of Lake Michigan. In its marvelous setting, the brick house must of necessity have challenged your admiration.

Its unusual design, coupled with its angular rooms, may have toyed with your personal tastes. Its terrazzo filled floors and stairs, and the roof garden, probably were a challenge to your imagination, but its overhanging balconies and canopies of brickwork, reaching out boldly and fearlessly into space, without customary supports, quite likely left you agasp with astonishment. And yet, the explanation is simple—the house you visited was built of Reinforced Brick Masonry—a new and practical method of design in building con-

struction and one distinctly in keeping with the spirit of the Century of Progress, and with the march of the science of building.

Contrary to your first impression, you soon discovered that the design of the house was not revolutionary—instead you realized that it was evolutionary and that it combined architectural beauty and structural strength in an effective and economical way.

Let us again revisit the house and make a detailed tour of the premises. We enter the grounds from Leif Ericson Drive and, passing through an open gateway between two brick posts, proceed toward the main entrance to the house. As we pass along we notice on our left, a beautiful bird bath and seat built of many kinds of brick, yet withal so beautifully blended in color as to produce a most pleasing whole.

Directly ahead is the porte-cochere which has as its roof the floor of the living and dining room. Here, were you the owner, you would park your car and quite effectively protect it from the elements. In fact, rolling doors of pleasing design could easily be installed and thus give your car the full protection usually afforded by a garage and at only a fractional part of the cost.

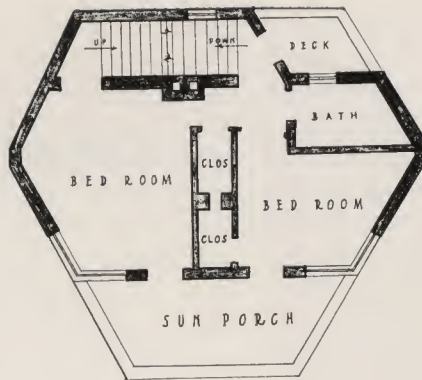
As you stand under the porte-cochere you observe that the floor of the living room and dining room are supported by a brick girder which in turn is carried by two columns. Didn't the beam and columns impress you with their warm toned bricks and white mortar joints? And weren't you intrigued by the sheer overhangs of the brickwork? They seemed so helpless, so unable to carry the enormous load from above and yet they did so easily and gracefully simply because all parts were reinforced with steel rods which caused the brickwork to act, in every sense, just like structural steel or reinforced concrete in industrial and office buildings.

Pausing in the driveway, with the house above serving as a canopy, you looked to the south and there you beheld the reflecting pool, flanked on both sides by reinforced brick masonry seats which suggested a quiet place of rest. Perhaps you journeyed down the warm red brick walks and rested for a moment on the bench built of the bricks from your native state and contemplated the artistry of the house and garden setting and you may have observed the round globe of brickwork at the south end of the pool. Symbolically, this globe represented the world, to indicate that brick circles the globe and is used in every country of the world.

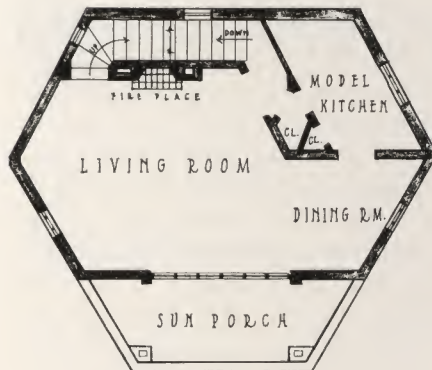
Let us now pass to the east side of the house. Here, with the ever restless waters of Lake Michigan on our right we find another seat and obtain another enchanting view of the house, with a wonderful play of light



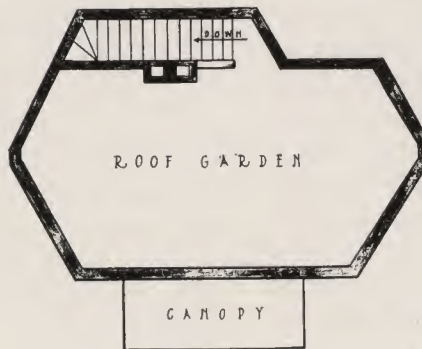
GROUND LEVEL PLAN



SECOND LEVEL PLAN



FIRST LEVEL PLAN



ROOF PLAN

and shadow effects brought into being by the brick patternwork and overhanging balconies. But we must pass on and proceed to the north or rear of the house. Did I say rear? Could it be possible that this enchanting elevation is the rear? Yes, such is the case, which only goes to prove that a brick house, when skillfully and artistically designed, can be made into a structure of eternal beauty from whatever angle it may be viewed.

As we stand looking north from the house, we see a low brick garden wall crowned at each pier with a flower box. What a practical and artistic way of dividing your property from that of your neighbor and what a natural background it offers for shrubbery, trees and flowers!

We have all too rapidly made a tour of the garden but we feel the urge to enter the house. We pass through the door into a small vestibule and on our right enter the door opening to the utility ground level space which houses the heating plant, air conditioning unit and the laundry. No dark, dank, ill-ventilated space here—no basement or cellar below grade to serve as a catch-all for those cast-offs which are religiously saved but never used. Instead space has been provided only for those essentials necessary to good housekeeping.

But we must proceed. Leaving the vestibule, we

slowly mount the stairs and here is an innovation. Reinforced brick masonry treads and risers with the mortar joints filled with colored terrazzo! And of course you notice that all surfaces of the stairs are filled, waxed and polished. What an example of ingenuity in building colorful, durable and firesafe stairs!

As we reach the top of the stairway another surprise is in store for us. The architect, not being content with building the stairs of Reinforced Brick Masonry, has built the floors and partitions of the same material. We expected to find wood floor finish and plaster on the walls, but no, the floors are again filled, polished and waxed and the walls are faithful to the material used and were left undefiled in their natural beauty of color. Only the ceiling is covered and that with a plastic paint to give contrast to other parts of the rooms.

We are standing in the hallway of the first or living room level, and looking into the kitchen through the doorway on our left we see a room relatively small in size and yet so scientifically arranged that every cooking convenience is at hand and can be reached with only a step or two in any direction. The walls covered with pastel shade glass tile are not only sanitary but extremely pleasing in appearance.

On our right is the open doorway leading to the living room and dining room. As we enter we are impressed by the broad expanse of glass in the south wall—the most advantageous side for the effective use of glass.

All doors and windows are of rolled steel and are fully glazed. As we stand in the living room and look about we see a round window in both the east and west walls—a charming departure from usual style, but what probably has caught your eye and fancy lays in the planning of the living room, dining room and kitchen without a single right angle or square corner. You look for the dining room and discover that the only mark of separation between it and the living room is to be found in the beautiful brick ceiling beam. The use of one end of a living room for the service of food is not new and the application is fast being accepted in many well designed homes, since it makes possible a double service from a given floor space that can be expanded flexibly to accommodate as many guests as may be present.

As we stand in the living room we are conscious of a superabundance of light and sense also an unusual condition of airyness. The glazed French doors invite us out onto the overhanging balcony which extends across the entire front of the house. Stepping out on the balcony we view the reflecting pool and the garden stretching to the south and with a slight turn of the head gaze over the sparkling waters of Lake Michigan.

Returning to the living room there confronts us, on the north wall, a homey fireplace laid up in brick patternwork which is distinctly unique and highly artistic. As we look to the right and left of the fireplace we observe a series of brick shelves and are surprised as well as delighted to learn that they are bookshelves built of reinforced brick masonry so strong that any one of them can easily support a man's weight. As we cross the living room to proceed to the next floor level, we notice that the entire floor is of brick laid in a basket weave pattern, filled, waxed and polished in the same manner as the stairway you ascended from the ground level. You are told by your host that there are no steel or concrete beams in the floor and that it is capable of carrying many hundred pounds of load per square foot through the simple use of small reinforcing steel rods laid in the mortar joints.

With much reluctance, we leave this charming level and ascend by another stairway to the sleeping quarters on the floor above. This stairway also is of reinforced brick masonry, finished in the same manner as the stairway below. Again we enter a small hallway. On our left is a doorway leading to an open air deck which provides a secluded spot for rest and cool comfort.

On our left, as we proceed, is the bathroom, small but completely equipped with every toilet necessity. Like the kitchen, the walls of the bathroom are finished with glass tile applied directly to the brickwork. As we turn to the right, through an arched opening we enter the master bedroom, commodious, light, airy and yet so arranged as to afford complete privacy. Before you leave this attractive room you surely will have observed that the walls have been painted with what is known as "flowing color"—that is, the shade is light at the ceiling and gradually grows darker as the coating proceeds to the floor line. To our left are two wardrobe closets, with a division space between which houses the cooling and ventilating units for this floor level. Again the balcony invites us, opening as it does off both bedrooms, and we step out onto it to obtain another splendid view of the premises surrounding the house. Returning from the balcony, we

enter the smaller guest or child's bedroom, ample in size and very comfortable. Again all of the floors on this level are of reinforced brick masonry. For the sake of contrast this room is finished in wall paper mounted on wallboard, which in turn is directly applied to the brickwork with a special cement. This does away with all lath and furring strips.

Having thus inspected the second level or sleeping floor, we proceed this time to pass outdoors and ascend to the roof by means of an open stairway finished in red bricks and amply guarded by a reinforced brick masonry stair wall. You may have expected to find a sloping roof; instead you step out on a flat roof finished in warm tone red brick splits. The roof area is amply protected by a high parapet wall which not only gives you a sense of security but likewise sets up and defines a space affording quiet, rest and an abundance of sunlight and fresh air. The chimney and the reinforced brick masonry shelter slab all add to the charm and beauty of the surroundings and doubtlessly will leave you with the feeling that here at last is a small house that is perfectly livable.

The brick house through which you have been escorted is built 100% of brick from foundation to roof. All floors and walls, where required, are suitably and adequately reinforced with steel rods. Not a single pound of structural steel or a yard of concrete was used in its construction. It is of a type and design the cost of which will easily fit the purse of the builder of a firesafe home.

Now just a word about brick and reinforced brickwork. Brick has been the preferred medium or material of construction for thousands of years. In the house you visited, brick was used in an unusually effective and economical way, namely, through the introduction of reinforced brick masonry. Now what is reinforced brick masonry? It is simply ordinary brickwork into which have been built ordinary steel rods of such size and so located as to effectively strengthen the brickwork in such a manner as to cause the two materials, brick and steel, to act together as a single unit. Reinforced Brick Masonry has been proven by tests and is steadily forging to the front as an accepted and approved type of construction.

We leave you now with regret. You have visited a house that must of necessity have left you with the feeling that here at last is a home in which all details necessary to health and comfort have been provided and were obtained at minimum cost. Its architecture is that of dignified simplicity,—beautiful, colorful and restful,—and in its setting amid flowers, shrubs and trees offers all that one could desire in the way of a home.

Financing the Home Is a Problem of the Utmost Importance

FINANCING the home is not only a problem of the greatest importance to every prospective builder but one of real consternation to many. The prospect of facing a mortgage is almost terrorizing to some folk. Yet it is inevitable in the great majority of cases. And after all it is a simple matter with no real cause for dread.

Generally speaking, commercial banks do not make construction loans except to established building contractors. Where they do it is usually through a subsidiary financing corporation. The most available funds for small home construction come through building and loan associations or the insurance companies. While their methods are similar the building and loan association is probably more often used because of its convenience.

Building and loan associations have been operating in the United States since 1831. Up to 1900 they had helped some 1,500,000 families to own homes. Since then they have grown tremendously and have loaned some 6,500,000 families money with which to buy or build homes. Some 9,000,000 people today have been added to the list of savers through them, either as investors or borrowers.

The first requisite for the prospective builder is that he own a lot without incumbrance. He may or may not have part of the necessary building funds. For the purposes of illustration let us consider a house to be built in Chicago at a cost of \$9,000, this price to include the lot. The building and loan association would make a loan of about 65 per cent of the total value, or say \$5,900. This is the customary percentage. The owner would provide the rest in cash. The interest rate would be 6 per cent.

This loan would be repaid, with interest, on what is known as an amortization basis, part of the principal being retired monthly. The monthly payments

covering principal and interest would run for 11½ years, at the end of which period the entire debt would be wiped out.

Two methods would be open to the borrower. The first, the so-called "direct reduction" loan—if he were paying 6 per cent interest and had 11½ years in which to repay, the normal lifetime for building and loan mortgages—he would be required to pay \$60.45 a month. Each year, as the principal was reduced, the portion of this \$60.45 to apply to the principal would increase as the interest charge became smaller.

The second method, the so-called loans on definite contracts, are not so prevalent although they are more to the borrower's advantage. Here the borrower becomes a member of the association by subscribing to shares equal to the face amount of the loan. As a member of the association, however, he is investing at the same time monthly amounts on his shares toward the retirement of the principal of the loan. His shares earn dividends just as do the shares of other savings investors. This is the advantage over the other plan. When his shares mature through his monthly payments and his dividends they are used to cancel his loan.

With most building and loan associations it is possible for the borrower also to make arrangements to take care of his insurance, taxes and any special assessments against his property, on the monthly payment plan. So after all this bogey of a mortgage is not so terrifying. It can be taken care of practically on the basis of paying rent.

And if you are haunted by the fear that death may interfere with the clearing of your property there are insurance companies that, for a surprisingly moderate premium, will obligate themselves to pay off whatever balance may be due when you die. Under the second plan all this could be taken care of for a monthly payment of approximately \$80, on a loan aggregating \$5,900, over a period of 10 years or more.

Long period mortgages of this sort are not so easily obtained from lending agencies other than the building and loan associations. Most of the others incline to a mortgage period of from three to five years. Few mortgages are paid off in that time so there is a refinancing operation or two to meet before you get out. And the financing company usually manages to shake you down for two or three hundred dollars in fees, bonuses, etc., on each transaction which explains their preference for short terms.

It is always best for the prospective builder to wait until he has enough cash on hand to bridge the gap between the amount he can borrow and the amount he will really need. Otherwise he must arrange for a second mortgage, which is a costly proposition that there isn't space here to explain.



Grosvenor Atterbury, Architect

The HIAWATHA

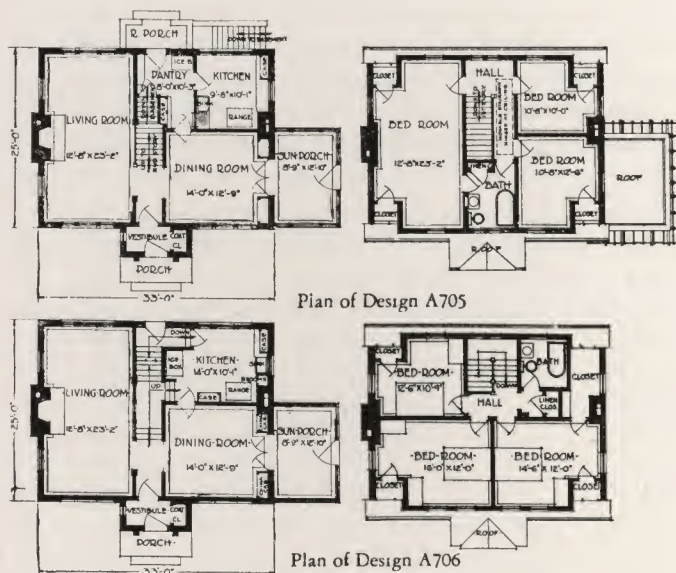
Designs A705 and A706

✦
This House has met with instant popularity because of its attractive exterior and the efficiency of both layouts shown.

✦
One of the Best Six Room Houses ever planned.

✦
26,428 Cubic Feet

✦
Price of Plans
Complete Working Drawings
and Specifications
The First Set \$25
Additional Sets \$2 Each



Selecting Architect And Contractor are Critical Tasks

GRANDFATHER built his house of logs hewn in the forest primeval. Dad let the local builder plan his. But your wife will probably decide the kind of house you will build. You may engage an architect to design it, but she will be the power behind the plans. For it's to be her home.

Incidentally this question of an architect is important. So also is that of a contractor.

Only within the last few years have architects of the higher class given attention to the designing of small homes. The depression and the slowing down of major construction is largely responsible. Today in most cities high grade architects are obtainable in this field. So, when you go architect hunting, be sure to look for a good one. He will cost you but little more than a poor one and you'll not regret the difference when the house is built.

For a long time the different exterior material industries were compelled to furnish plans in order to encourage folk to use their products. That was before the architects awoke to the necessity of educating their public and to the possibilities of the small home field. Some of our own plans are scattered through this book. All of the houses shown were designed by good architects and all have been built; some of them a thousand times. The plans are practical, proved, attractive; the arrangement convenient, and the prices moderate.

Employment of an experienced architect will save you money, annoyance and possible heartache. You might economize by entrusting your problem to some building contractor but no amount of money it would save you could possibly repay you for the lasting regret that might come from finding, when it was too late, that some serious and irreparable mistake had been made in construction or arrangement.

The architect will insure you good design and good construction which are paramount requisites. His knowledge of materials will provide you the best for the money expended. His experience will prevent the waste that frequently comes from lack of supervision and the consequent indifferent workmanship. Even if you decide to make use of one of our plans

you will be wise to have an architect supervise construction. For he can take care, with the least expense, of any little departures you may desire to make from the plan as it now stands.

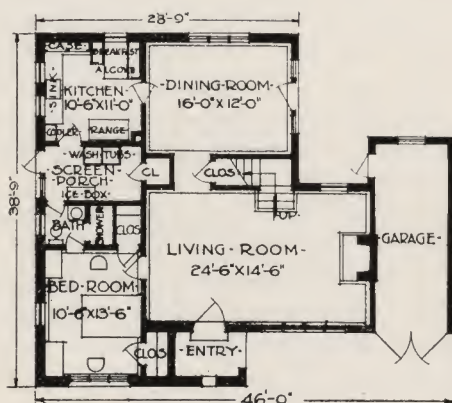
Especially is an architect desirable in brick construction. Brick is a most versatile material. It can be used to supplant any of its competitors in the exterior wall field with equally good effect, and generally with improvement. It has an infinite variety of colors with which the architect of aesthetic inclinations may work much as does an artist with his paints. The development of tapestried effects in the wall, of the popularity of the clinker brick, the vogue of skintled brickwork which has spread from Chicago, where it originated, to all parts of the continent, and the infinite varieties of pattern-work, are all due to the ingenuity and artistry of the architect busy with some constructive dream.

Architects are constantly seeking new effects, new materials or new applications of the old ones. Architecture is changing. The architectural motif at the exposition was modernesque. The super-safe brick house was evolved to fit harmoniously into the picture. It is a combination of advanced architectural ideas and an almost forgotten engineering triumph of a century ago. But the principles merged in its construction are destined to dominate the small home construction of the future, insuring the maximum of safety, long life and economy.

Such attainment necessarily involves the contractor, and the selection of the man to build the house you can afford, and build it in the best workmanlike manner, is quite as important as choosing an architect. Assuming that you will prefer a brick house of the super-safe type, with reinforced walls, floors, partitions and stairways, the most pertinent advice to you will be that you make certain to secure an experienced mason contractor. Have no other.

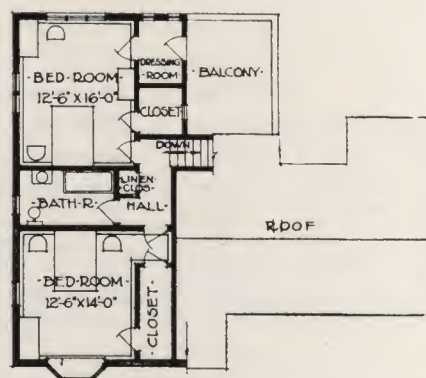
Mason contractors in the small home field are really specialists. They have to be in order to compete successfully with their rivals in other types of construction. Brick houses cost a trifle more than those of frame. Most folk believe they cost a great deal more. So some 85 per cent of all small homes in the past have been built of wood, because the country has acquired the frame house habit in the mistaken belief that they are most economical. The trend in recent years has turned strongly to brick, now the most popular type of home in America.

So some carpenter contractors, not qualified to do masonry work, much less reinforced brick masonry, will endeavor to convert you to frame construction. Make sure of not only a brick house but good workmanship as well by selecting none but a mason contractor.



The SIERRA
Design A611

A Six Room House
(Attached Garage)
with One Bedroom
on first floor



24,400 Cubic Feet



Price of Plans
Complete Working Draw-
ings and Specifications
The First Set \$10
Additional Sets \$1 Each

Build Your House Where It Will Sell Twenty Years to Come

USUALLY there comes a time in the life of every home owner when unexpected changes of one sort or another make it necessary or desirable that he dispose of his home. Conditions are persistently shifting with all of us. Life is more or less constant change, and one should not count too confidently upon what the future holds in store. The best we can do is use our best judgment in providing against what may happen.

Realizing this it behooves the prospective builder to give most careful consideration to the selection of the site for his home, the plans therefor, and the materials of which he shall build it. He should always bear in mind the possible resale value of his property, if it is thrown unexpectedly upon the market. If it is well built, well planned and advantageously located with reference to those conveniences so essential to the city dweller, transportation, stores and schools, it will doubtless always find a ready purchaser at a good price.

The neighborhood should always be given paramount consideration. Much depends upon this. Never risk building a house in a neighborhood that is already retrograding. Once it begins to go down it rapidly hits the toboggan. In every city today are sections that were once fine residential districts yet now are little better than slums. Once deterioration begins, from whatever cause, values immediately decline, demand is confined to the incoming element which is usually aware of the situation and gauges its offers accordingly, so in the end you either make the best of conditions or sell at a loss.

Not all real estate men will be entirely frank in their efforts to sell you a lot. But ordinarily you will know one upon whose judgment and statements you can depend. He can tell you at least about developed territories. If you go into a new allotment you must take your chance unless the reliability of the realtors

is unquestioned. Too often the assurances of salesmen, whose business is to sell lots on the principle of let the buyer beware, mean little or nothing. So you can never know in advance who is to be your neighbor. Money doesn't seem to care who has it, and too many real estate men do not care to whom they sell.

Do not make the mistake of building a house whose cost is out of proportion to that of the lot, or, in fact, that of the average house of the neighborhood. It may be fine for a time to feel that you have the finest house on your street, but when you come to sell it you will find its value is gauged by its surroundings. Not every possible buyer will have your peculiar quirk of mind.

Other important considerations are transportation facilities, proximity to desirable schools, the nearness to stores, the completeness of street improvements and whether there are unpaid special assessments against the lot. Make certain all improvements are in before you buy. Take nothing for granted. Once you buy it is too late to protest.

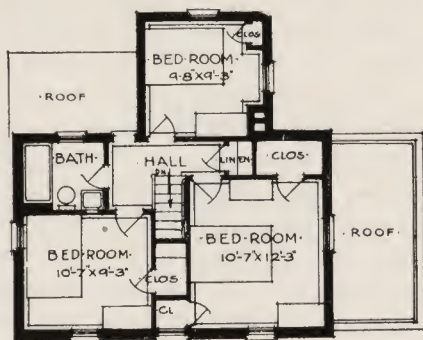
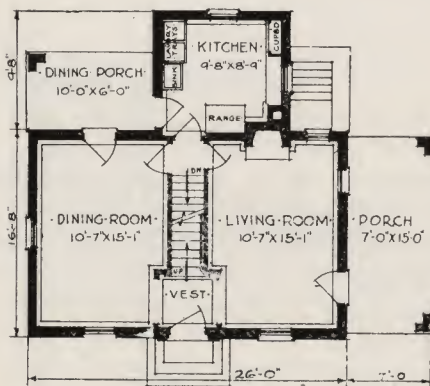
Do not choose a site too far from the street car line or the school. Nor too near the business district. There is always a convenient average in this respect. A side street is often preferable to the main thoroughfare on which street cars and streaming traffic make for dust, din and not infrequently discomfort and frayed nerves. Quiet and a certain degree of privacy is always an asset. Get a lot sufficiently large for some shrubs and flowers and a play ground for the children. Large enough to permit you to feel that you have room to breathe. You can always plan the house to fit it, whatever the size or the shape. The main thing is to have it where it will be saleable twenty years hence.

Planning the house is a task that intrigues most ultimate builders over a period of years. Once they decide upon a home they thumb the magazines ragged for ideas. Buy plan books galore. Change their minds every month but eventually reach a more or less nebulous conclusion that is still subject to amendment. The best plan is first to decide upon how many and what sized rooms you will need. Outline your floor plan in the rough. Work out a convenient arrangement, letting the wife do the dictating, for after all, she will spend more time in the house than anyone else and her ideas should prevail.

Then search your plan books for something that approximates this arrangement and yet has exterior character and charm. Or, if you employ an architect, hand him your outline and let him work out the details. Above all, build firesafe, for peace of mind. Adopt reinforced brickwork such as was used in the super-safe house at the exposition. It is adaptable to any architectural type. It will save you worry.



Theodore A. Meyer, Architect



The UNCAS
Design T101
A Six Room House



Attractive, well planned and economical. Built with Hollow All-Rolok Walls.



15,310 Cubic Feet



Price of Plans
Complete Working Drawings and Specifications
The First Set \$20
Additional Sets \$2 Each

Reinforced Brickwork Makes Possible Low Cost Super-Safe Home

JUST as morning after morning through the ages the world has waited for the sunrise so has a home loving people been waiting for the dawn of the day that will usher in a moderate priced home of permanence, a home that will be safe from fire, from tornado, from earthquake and the natural ravages of the elements as the years roll past.

That day has dawned at last!

The reinforced brick masonry home exhibited at the Century of Progress Exposition, that interested prospective builders may have the benefit of the very latest development in home construction, measures up to the popular demand in every respect.

There is not an inch of inflammable material in its walls. It could not possibly be burned. Reinforced throughout with rods of steel it will defy the worst tornado. That same tensile strength which the reinforcement adds in such astonishing degree makes it proof against seismic shock. And against its walls of burned clay the elements may rage in vain through centuries to come.

It is really the ultimate in perfected super-safe, moderate priced, small home construction. For under ordinary conditions, in almost any locality, it can be built for around \$5,000.

More nearly than any other house of the century it attains the goal for which builders of small homes in America have been striving for many years.

The house is unique in several important features other than cost. It is the first reinforced all-brick house in America. It is the only house of its kind in all the world. It is hexagonal in shape for purely scientific reasons. It is modernesque in architectural motif to comply with the arbitrary requirements of the exposition management. It has an above ground basement and a roof garden.

It is really a marvel from the construction viewpoint. All of the brickwork in exterior and partition walls, in the stairways, the floors, the balconies, the

roof and even the parapet walls, is reinforced with steel rods. Tests of this type of brick masonry prove it to have at least five times the strength usually required by city building codes. In this respect it approximates sky scraper construction, yet it is a small home of moderate cost.

It will be noted that the rear of the house, which faces in the direction from which come the prevailing winter winds, has comparatively few openings. The exposure is southern and the windows are so placed that they insure a maximum of sunlight and comfortable ventilation. The solid rear wall shuts out the cold and reduces fuel bills. The hexagonal shape eliminates sharp angled corners in the rooms and permits an easier arrangement of furniture.

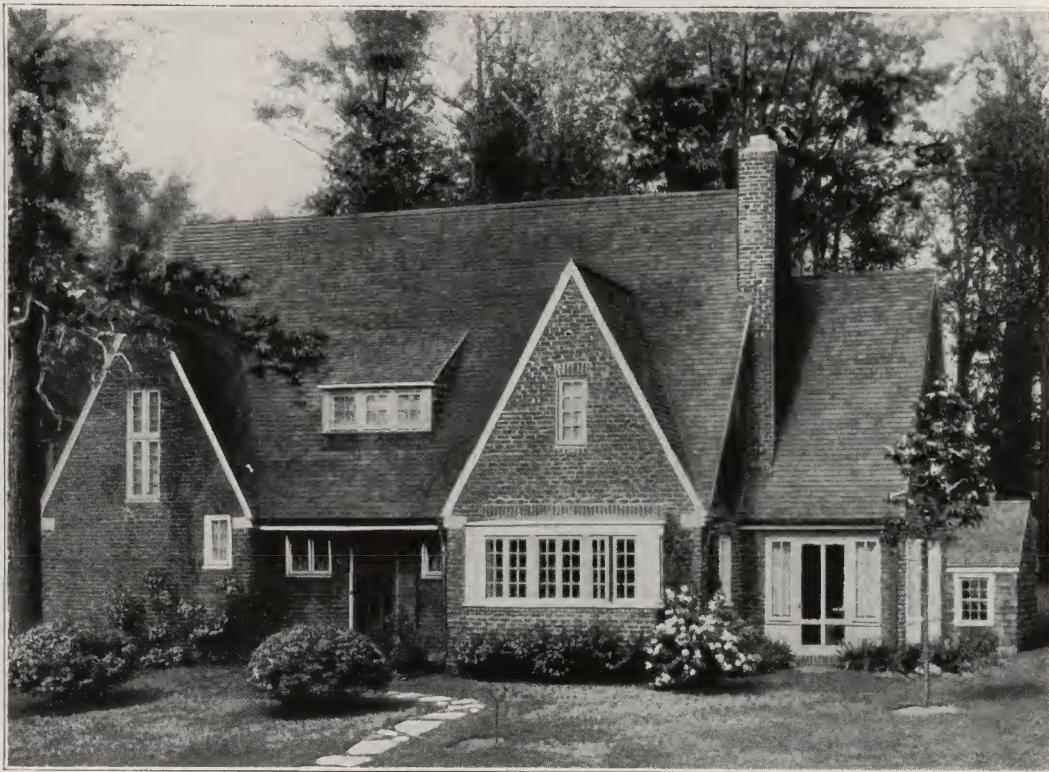
Side walls and floor in the combined living and dining room have a natural brickwork finish with the surfaces ground smooth with a terrazzo machine and treated with a transparent glaze which heightens the brick colorings and produces an effect both novel and pleasing. The ceiling is painted in the rough and is also appealing. This type of natural rough finish obtains in the sleeping rooms.

Substantial economies are possible from retaining this natural finish for the interior walls and the elimination of the basement excavation. At the same time a light, airy and more sanitary basement is insured above ground. Other unusual features of the house are the two balconies and the roof garden offering enjoyment possibilities provided by no other small home in this price level.

This modernesque type of architecture doubtless will fail to please many prospective builders, however much they may be astonished and delighted with the beauties developed in the finished masonry walls. It may be well to explain to all that this type of construction, reinforced brick masonry, may be utilized just as effectively in any of the more conventional architectural styles.

This exhibit was not intended to sell this particular architectural motif, which as has been stated was mandatory under the exposition rules. Instead it was meant to emphasize a new and evolutionary construction type which insures super-safety and peace of mind to every home owner who has learned to fear fire, tornado or earthquake.

Reinforced brick masonry is not only moderate in cost but permanent far beyond the life expectation of any man who adopts it in his home. And the brick wall itself will free him forever from upkeep cost. Its color will mellow gracefully with age; it will never need a new or artificial complexion; no lip stick or dolling up on special occasions. Its beauty is burned in and lasting; as firmly fixed as its own steel ribbed self.



Leland Lyon, Architect

The LEICESTER

Design T104



Six Room House
With Sun Porch
and
Sleeping Porch



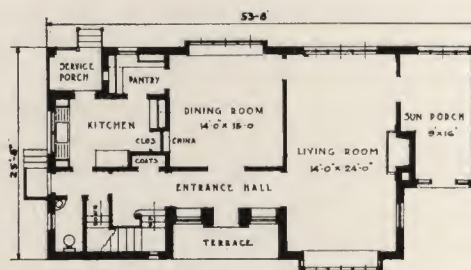
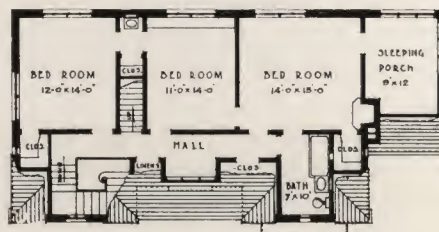
A Home in English style
designed by an architect for
his own use.



36,000 Cubic Feet



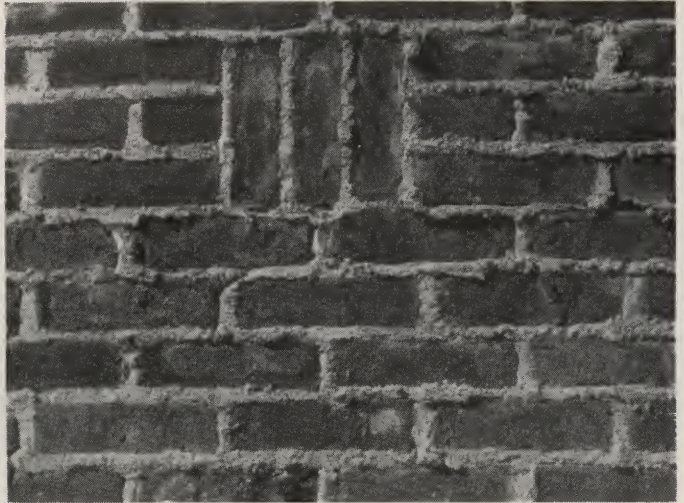
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Exteriors of Brick

Offer Their Beauties

In Many Treatments



J. J. Cromwell, Architect and Owner, Woodmere, L. I.

A variety of reds in a pressed joint with natural mortar.

EXTERIOR treatments of brick walls are of a wide range, consisting of the different handling of the bond and mortar joints and an extensive variety of patternwork. The former apply to the wall in the aggregate, the latter to specific decoration. There are half a dozen standard bonds of which the Flemish is perhaps not only the most attractive but it provides the most substantial wall. Mortar joint treatments are more numerous.

Most folk are familiar in a general way with the conventional bonds and the more common joint treatments. At least they have seen them for they may be all found in any street where brick construction prevails. The different types represent no particular period for they have all been used for many years. A

single exception is possibly the extremely thin joint that was in vogue a quarter century ago.

The latest development in this respect is skintled brickwork, developed in Chicago during the World War period. It follows no rule save that the effort is to make the surface of the wall as rough as possible. The bricks in a wall of this type appear as if they had simply been tossed into the mortar and permitted to rest where they fell and in whatever position. Sometimes the joints are pointed and often they are not. Sometimes the mortar obtrudes or hangs over the edge of the brick, caused by the brick being firmly pressed into position.

One of the accompanying illustrations shows a type of skintled brickwork with projecting headers. Another is a pressed joint with the mortar uncut. The third is the ever popular raked joint.



Van Pelt, Thompson & Churchill, Architects, N. Y.

Mixed clinkers and swelled brick, laid all-rolok, headers projecting.



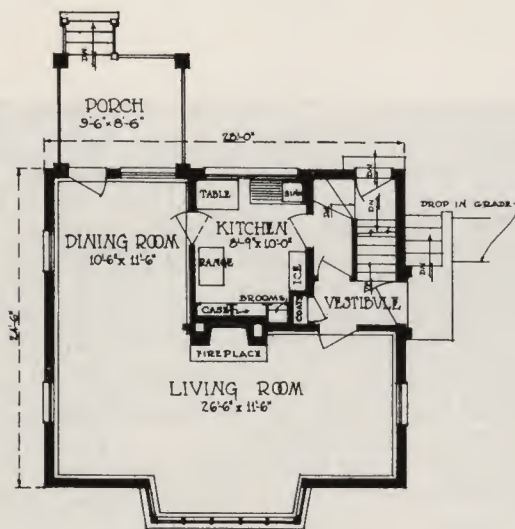
A. L. Loveless, Architect, Seattle.

Darrah Corbet, Owner.

Note the play of shadows in this deeply raked joint.



Olaf Shelgren, Architect



The POTOMAC

Design 120



Six Rooms

With an Unusual
Living Room



Entrance from the
side.

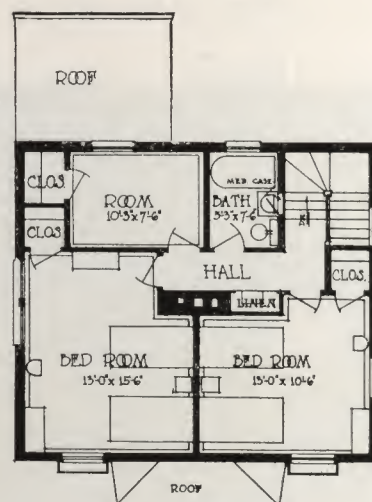


21,933 Cubic Feet



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Brickwork Has Proved Itself Through Many Centuries of Service

IT IS A FAR CRY from the days of Babylon and Ur to the present. Much has transpired and many changes have taken place in bricklaying methods. Then the mason used bitumen for mortar, or plain wetted clay. Today he uses not only mortar of the highest grade but reinforces his wall with rods of steel. In both Babylon and Ur are yet standing many of these early walls of sun dried brick. If they are staunch after nearly 6,000 years what might be expected of a modern reinforced wall?

Incidentally the large brick inclosed in the cabinets in the wall beside the entrance to the super-safe house came from an ancient temple wall in Ur. The oldest date back nearly 5,000 years.

Even in those early days brick walls were not only standard construction but they were the best. They are yet. No other type of wall offers the fire-safety, the permanence and the long time economy that a brick wall insures. They have stood every test, met every requirement, outlived all others.

They are impervious to fire, having had their baptism in the burning. They resist the onslaughts of the elements and neither crack nor spall from the effects of frost. They do not rot or warp. They retain their color and need no painting. They stand up under all natural attacks.

All a brick wall needs to make it the most nearly perfect of all walls, just as the brick is the most indestructible of all man-made materials, is good workmanship. This has been demonstrated under the most trying conditions. In the several Florida hurricanes of recent years well built brick houses came through virtually unscathed where other types were torn to pieces. In recent California earthquakes, not except-

ing the latest, in the Los Angeles area, brick walls that were properly constructed withstood the shocks, those that collapsed were invariably ones that had been slighted in construction. This statement has been confirmed by the reports of expert engineers who made official investigations.



California Theatre, brick undamaged.

Unfortunately for California, many architects and builders have believed, due to the climate, that the solid type of construction with which most of the country is familiar and finds necessary, was not required there. Construction of all kinds, in houses and buildings, has inclined rather to the flimsy type. The accompanying illustration of the damage to a California hotel shows that pillars seemingly strong and massive were in reality either mere hollow shells of only one course of brick or veneered concrete pillars, the brick on the latter having no ties of any kind to hold them to the concrete. Brick veneer in practically all cases simply shook away from its wooden or tile back-up, the usual metal ties being too weak to hold it or having completely eroded away. This may always be expected.

Too much importance cannot be attached to good workmanship and to the use of good mortar. That the best bond may be obtained the bricks should always be wetted before being placed in the wall, especially in summer when the brick are dry and may be hot from exposure to the sun. A brick in that condition, particularly if it be porous, will quickly absorb the water in the mortar with the result that the set is seriously impaired. Experiments have established accurately the best mortar mixes for different uses. Any experienced mason contractor is familiar with these facts.

The use of metal ties, such as are used in brick veneering, is always an invitation to trouble. Solid brick walls, or one of the several types of Ideal hollow wall, will insure you better service and satisfaction. There the frequent use of header courses which extend clear through the wall insure its staunchness. Of the bonds, the Flemish, in which the use of headers is most frequent, produces the best wall and ensures a very attractive exterior.



These imposing pillars, merely a camouflage of veneer, failed to stand the strain.



The FRESNO



Coziness and Compactness feature the interior arrangement of this unusually attractive little bungalow of the California type. No convenience has been overlooked. It is well lighted and always will be cheerful. And it is firesafe.

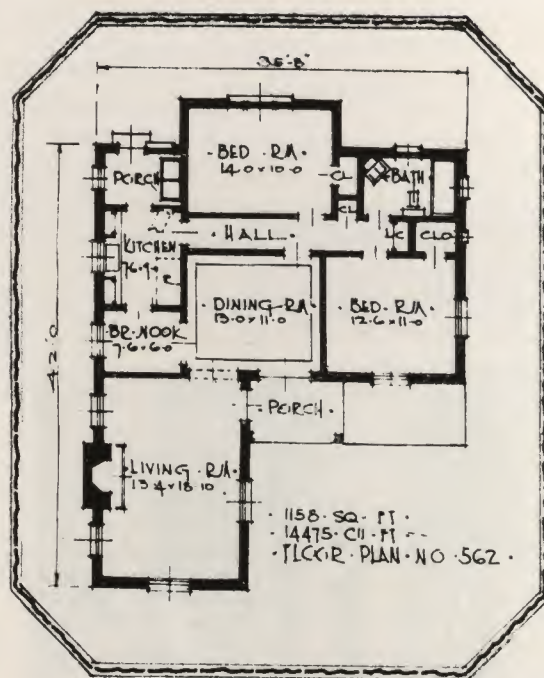


This is a Santa Barbara Home where Spanish Architecture is both predominant and mandatory.



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Poor Landscaping Mars the Beauty of Many a Fine Home

LANDSCAPING can either make or mar the beauty of the grounds about the home. Too much of what is generally accepted under that name is no more nor less than indiscriminate planting of shrubbery with no definite end in view. Much of it is entrusted to servants or men employed about the grounds or the estate whose normal duties range all the way from gardening to donning a butler's uniform during calling hours. Most owners of small homes assume the responsibility themselves subject always to the advice of their wives.

As a case in point may be related the experience of a millionaire captain of industry who bought a small farm in the country some years ago with the intention of building himself a bungalow where he might entertain his bachelor chums over Sundays. He ended up with a thousand acres surrounded by a huge concrete fence and a house that cost him nearly \$200,000. It chanced that his English butler had been taught the rudiments of gardening on an English estate where his father was head gardener. That butler eventually directed the landscaping of the grounds about the millionaire's home.

If you desire an artistic job of landscaping do not attempt it yourself. Secure the services of an expert. All who saw the landscaping about the super-safe brick home at the Century of Progress Exposition were charmed with its simplicity and effective appeal. The illustration elsewhere in this book is a testimonial to its beauty.

There the walks were all straight. There were no winding paths. They went where they were intended to go in the shortest way. They were rounded just enough to shed the water on rainy days. All were of brick. Where trees were used they were straight and sturdy, branching high above your head. Flowering trees and bushes in radical and bright color combinations lent life and zest to the yard. The drive came

at the side of the house, practical to the utmost degree without wresting beauty from the plan. Flower boxes were placed to advantage, along the little pool which absorbed unobstructed the purifying violet rays of the sunshine, and upon the division garden wall in the rear. Nowhere did bushy trees or matted vines hold a death warrant over the grass. Every inch of the yard was appealing and usable.

Just as doors should be properly placed in a room for most convenient entrance and exit; and windows fall in logical places for best light yet balance with the larger openings; so walks and driveways should lead into the grounds from the directions from which the house is most frequently approached. Straight lines should be the rule, with curves used only where necessary to avoid angularity.

James W. Owen, landscape architect, of Bloomington, Ill., who did the work, suggests straight walks and drives instead of winding ones. Tall sturdy trees that require little care yet blend with the setting and give a pleasing background. Smaller trees for the lawn which will not hide its beauty from the front of the house, and flowering shrubs to aid the bedded flowers in splashing vivid color through the entire ensemble. These are directions easy to follow and inexpensive to carry out.



Photo by J. Walter Collings.

A brick walk which has all the mellow richness of an Oriental rug.



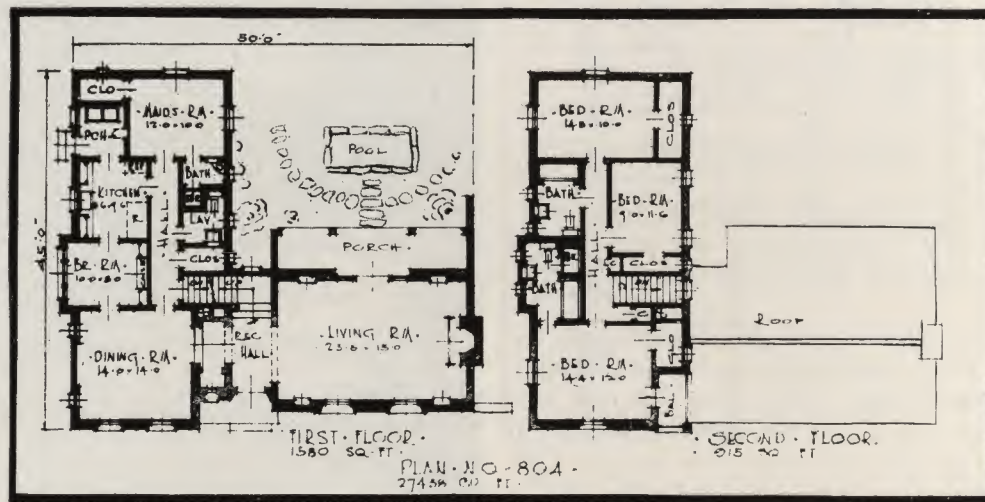
The JUAN CANTINO

This type of super-bungalow is being developed in some of the larger cities of Southern California and is winning instant favor. In this instance the wrought iron railed balcony above the entrance is just an added Spanish innovation. Rough brushing the walls with a coating of cement, or whitewash, provides a sharp contrast with the red Spanish tile roof.

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Brick Garden Walls

Gain Added Beauty

Under Leafing Vines

GARDEN WALLS of brick may always be relied upon for long time economy, for resistance to the ravages of the elements, and a permanent beauty which is peculiarly intensified by the verdant covering of branches and vines without which no garden wall is ever altogether complete. Garden walls are built both for utility and ornament. If it is possible to get the maximum of decorative effect from a given type of wall at moderate cost, with the assurance that it will stand for a lifetime without necessity for expenditure for upkeep and repairs, that is a desirable wall to build. The brick wall measures up to that standard in every respect.

No other wall material offers such a wide variety

in color quality and richness as does brick. Almost every locality can supply brick of vastly differing hues, and if the local product chances, as is sometimes the case, to be of one general color, your local dealer in builders' supplies can get for you any varieties you may desire. For today the range of color tones is more extensive than ever before and the dealer must cater to a more fastidious demand. It is particularly an age of color.

Something of this infinite variety of color tones you probably observed in the walks, walls, and garden furniture in the grounds at the super-safe house at the Exposition. There, in the Garden of States, were brick from all sections of the country, many of them vivid in the richness of their coloring. In variety of texture they were almost as extensive, ranging from the hand made types of our Colonial ancestors to the ordinary machine cuts.

The garden wall in the rear of the house was not only an artistic example of brick masonry but it initiated an idea that doubtless will be widely adopted in garden wall construction in future. On top of each pilaster was a flower pot from which trailed a profusion of vines, while their centers were aflame with gorgeous blooms. Each of these pilasters was sunk below the frost line in the ground and built hollow to the top. This hollow space was filled with earth and the flowers thereby not only had ample soil depth for deep rooting but were provided with adequate and necessary drainage.

The wall shown here is in the formal garden of one of the leading architects of New York. The brick were selected particularly for their color effects and the clinker headers which stand out so prominently are lacquered a sooty, soft ebony which contrasts sharply with the varied and lighter hues in the wall. Upon such a wall as this the greenery of shrub and vine serves to heighten the effect of every constituent part with the result that the maximum of color richness and contrast may be enjoyed throughout the growing season.



Grosvenor Atterbury, Architect.

Photo by Samuel Gottschal.

A garden wall built with a view to artistic color blending under nature's green robing.



Yeager & Krause, Architects

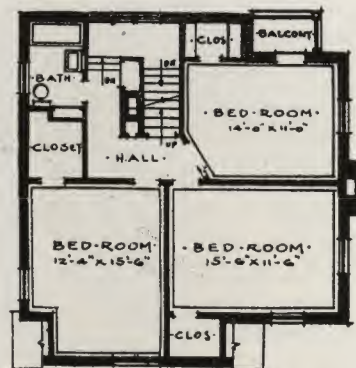
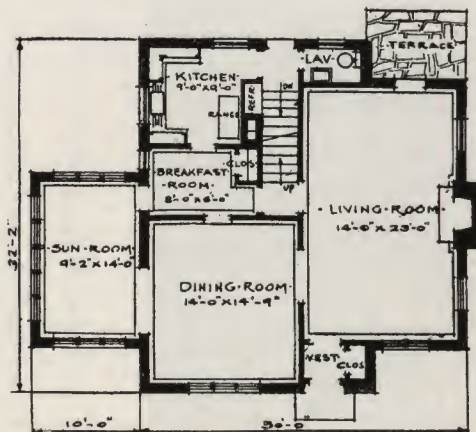
The ARAPAHOE

Design A652

Six Rooms with Large Sun Room

Note the attractive small breakfast room and special features like the lavatory off kitchen.

Complete Working Drawings
and Specifications \$10
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Wrought Iron Adds Beauty and Dignity To the Brick Home

BETWEEN wrought iron and brick masonry there is a peculiar affinity. They harmonize in every treatment, each increases the charm of the other, and finally they grow old together gracefully. Nowhere in America is this better demonstrated than in New Orleans, Mobile and Charleston, those interesting and delightful old southern cities where more than anywhere else the Spanish love for intricate and lace-like designs in hand wrought iron gates, grilles, stair banisters, and balcony adornment has been indulged to the utmost. Therein lies much of their charm to the architect and the most readily recognized remnant of the early Spanish influence to the layman.



Entrance to the offices of Johnson-Meier Co., Chicago.



An excellent example of wrought iron grille from the studios of Johnson-Meier.

Strolling along Jackson Avenue, Esplanade Boulevard, or Prytania or Royal streets in New Orleans, the lover of this fascinating type of ornamentation, so popular in the days of the Spanish occupation, may fairly revel in a maze of wrought iron balconies almost web-like in their daintiness of design, many of them replicas of patterns imported from Old Spain more than a century ago. For the Spanish and the Moors were artists par excellence in their own lands and their adventurous sons carried with them the loves and artistic ideals of their youth.

Ornamental iron has never gone out in southern Europe. More than ever it is coming back in America. Its beauty even in a simple design is a joy forever. Its usefulness and decorative effect carries the same satisfaction that for centuries has inspired its use in many styles and many countries. The mansion of to-day, as the castle of old, has its wrought iron entrance gates, rails, balconies and window grilles, while inside are the stair railings, screen fireplaces, console tables, fern stands, flower brackets and numerous other objects making for beauty and dignity. It is so essential to many types of home that its absence becomes instantly noticeable.

The artistic ironwork used in the super-safe house at the Exposition was supplied by the Johnson Meier Company, of Chicago, whose reputation for excellent workmanship has been well earned.

Reinforced Brickwork Is Adaptable to All Kinds of Buildings

REINFORCED brick masonry, the type of construction used in the super-safe house at the Century of Progress Exposition, entered a virgin field in this operation. So far as the records show this is the first time it has ever been used throughout in the erection of a small home. The experiment was made for the sole purpose of demonstrating that through its use there can be built a house that is as nearly indestructible as a house may be. And at a cost that makes it attractive to the prudent man.

It is not a new idea, insofar as merely brick reinforcement is concerned, but one that has been long and sadly neglected. It was originated more than 100 years ago, in 1824 in fact, by an English engineer who

utilized it in the building of a bridge in London. Like many another good idea it was a century ahead of the times. Possibly had England been subject to earthquakes it would have found ready favor. But London already was building firesafe, chiefly of brick, by Parliamentary decree which had been effective since the great London fire in 1666. So reinforced brick masonry was all but forgotten after it had served a temporary purpose.

In recent years English architects and engineers have been using this construction in India and it was from there that the Brick Manufacturers' Association, some three years ago, appropriated it. Before it could be offered to the engineers and architects of America its worth had to be proved. During these three years an extensive series of tests have been made, its trustworthiness definitely established, and a handbook issued which covers the fundamentals and all of the construction features immediately necessary for the architect, engineer and contractor.

Meantime it has been used in a wide variety of industrial and general construction. In Illinois for the erection of immense sand storage bins of the circular silo pattern and for elevated industrial railroad switch trestles; in Arkansas in the elimination of railroad grade crossings; in Pennsylvania for bridges and industrial warehouses, the latter by the Westinghouse Manufacturing Company, near Pittsburgh; in Illinois by the Standard Oil Company in their oil refinery construction; and in Maryland for the inclosing of a monster steel water storage tank at Baltimore, the

unsightliness of which finally aroused public indignation to a frenzy. These are some of its larger uses although there have been fifty or more different construction operations in which it was used and found entirely satisfactory. And interest in it is increasing by leaps and bounds.

The various tests have shown it to have a strength that has astounded engineers and architects who witnessed them. Slabs such as were used in the roof of the super-safe house developed a load-bearing capacity of more than 300 pounds to the square foot, and that is several times more than city building codes require in any type of commercial or industrial structure floors. It opens for reinforced brickwork a promising field, especially where floors are subjected to the action of acids, to which brick is impervious. This type of floor is



Photo by Blakeslee-Lane Studio.

This ornamental reinforced brick structure incloses an unsightly steel water tank.

also admirably adapted to auditoriums and exposition halls where unusual stresses are imposed.

The lessons of the recent California earthquake are serving to arouse a keen interest in reinforced brickwork on the Pacific coast and there is every promise of its being adopted there in major commercial and industrial building. Reinforcement chiefly adds tensile strength to brickwork's other many commendable qualities, and this is a very necessary factor in resisting the effect of seismic disturbance. Reinforced brickwork, erected in Japan since the extremely disastrous earthquake of some ten years ago, has performed in a highly satisfactory manner.

In providing the Baltimore steel water tank with a weather-proof overcoat of reinforced brickwork the city used some 600,000 brick. The brickwork alone cost \$22,000, the entire job \$44,500, which was almost 50 per cent under the first bids submitted on competitive materials. Reinforcement permitted the use of a thinner wall and reduced the original brick estimate on a solid wall without reinforcement by 150,000. The tank was unusually large, being 110 feet in diameter and 60 feet in height from the base to the top of the plate section. The wall varies in thickness from 17 inches at the base to 13 inches in the courses above the pilasters on which the series of arches are built. The tank has a capacity of 4,000,000 gallons. The entire wall is reinforced above the concrete base with $\frac{1}{4}$ -inch steel rods. From the base to the bottom of the depressed panels the brick shaded from dark to light, and from the top of the panels downward to the circle the shading was reversed, producing a novel effect.

The bridge illustrated below was built at Philadelphia, across a streamlet which runs through the grounds of a golf course. It is sufficiently wide to permit the passing of two automobiles and strong enough to carry as many as could be piled upon it. It was built entirely without supporting falsework, two crews of masons working from either abutment and eventu-



Photo by Blakeslee-Lane Studio.

Here is a fine example of the application of reinforcement in a brick wall.

ally joining it in the middle. This is one of the most novel applications of reinforced brickwork yet attempted in America.

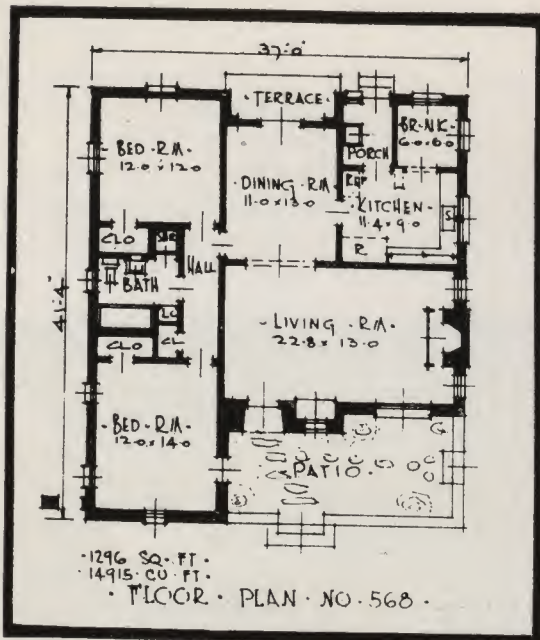
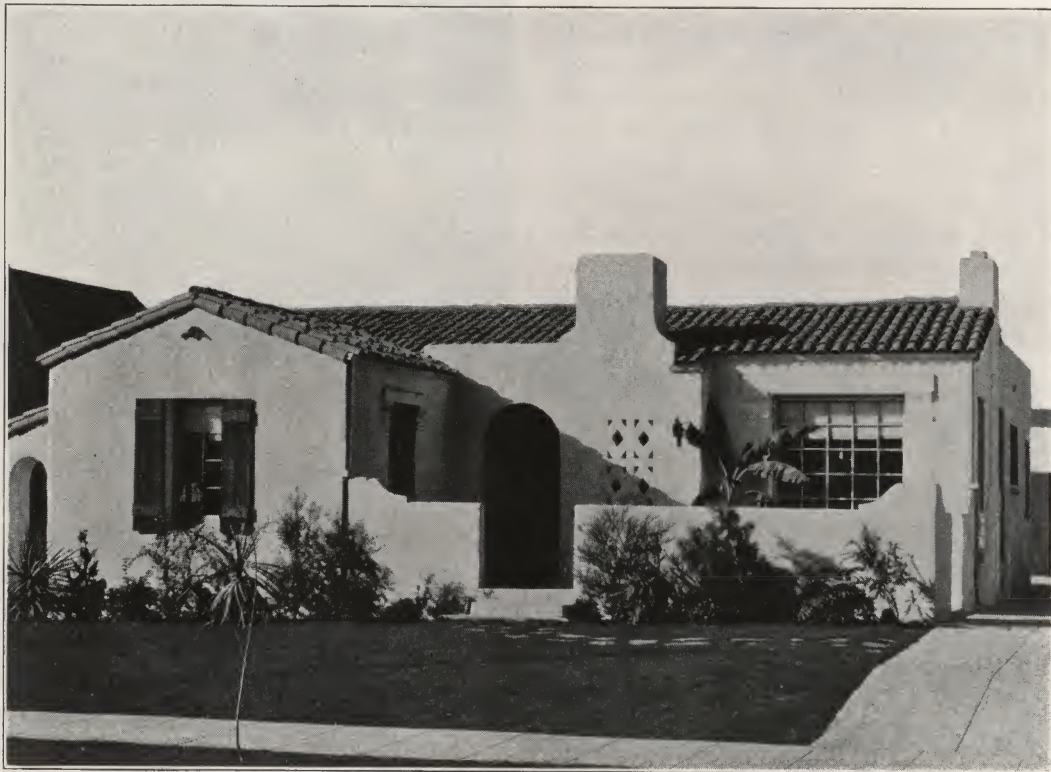
Some idea of the manner in which the reinforcement is applied may be had from the illustration above. This was an industrial building, a storage bin where the side thrust was excessive. The reinforcement in consequence is heavier than is necessary in most instances, but in other respects its application is in the usual fashion. Here all of it that can be seen is vertical, but further to insure strength occasional horizontal rods were inserted between the brick courses. The wall completed was less than half the thickness that had been contemplated for a solid wall without reinforcement, while the difference in cost was trifling. It will be necessary to dynamite this wall if it is ever demolished.

Reinforced brick masonry is adaptable to retaining walls, sewers, tunnels, cisterns, swimming pools and nearly every type of engineering construction.



Photo by Blakeslee-Lane Studio.

A moveable center was used to span the gap of 8 feet in this bridge which was built without falsework.



SAN JACINTO

Distinctly intended for some place where the skies are always clear and blue, the foliage rich in color and luxuriant, nature smiling and the air redolent with the perfume of shrub and flower and vine abloom. A genuine whiff of the atmosphere of Southern California where three centuries ago the adventurous

Spanish Padres were laying the foundations for an architecture which is just now coming happily into its own.

Plans and Specifications, \$12

Interior Decorations And Furnishings Were Specially Designed

THREE fundamental qualities must be borne in mind in approaching the decorating and furnishing of any dwelling, namely, fitness, service and beauty. These are correlated but distinct qualities which can be attained only by successful coordination.

Fitness is of the utmost importance in bringing into the proper relation the various major parts of interior furnishings: such as walls, floor coverings, light and furniture, in regard to scale, quality and color values. Very often an interesting wall covering with large, gaudy color design will so dwarf the furnishings that they appear uncomfortable and unserviceable at the start. On the other hand, furnishings of heroic scale with upholstery of violent fabrics will appear to walk away from wall surfaces. It is this poor sense of relation of all individual parts that makes a study of fitness in relation to the whole of primary importance.

Service applies more directly to the actual furnishings in the house; that is, chairs, couches, tables, etc. Certainly we should not litter our homes with oddities of furniture that are neither applicable nor useful to life in the ordinary home. For this reason a careful selection of pieces, judged as to the size and variety which will properly and correctly furnish the room without overcrowding, should be made.

It is always well to remember in furnishing a room the importance of freedom of movement, so that there is no necessity of being on one's guard against knocking over this or that small table or running into a chair bought because of its particular appeal to the home owner, but occupying a space which should have been left clear. Simplicity, as a keynote, should be borne in mind constantly, and brought to the fore when a sense of overcrowding is likely to dominate.

Beauty is the next factor in selecting the various furnishings. The quality of their beauty depends necessarily upon the taste of the individual home owner. Should he or she be at all skeptical as to his or her power of selection, it is far better that a person of standing be consulted, one who has made decorating a study and profession.

Beauty lies not alone in the lines of a single piece of cabinet work but also in the selection of woods and interesting treatment of finish. Not alone in the color

of an upholstery fabric or window drapery, but also in their design and texture. Not only in the smart design of the wallpaper or rug, but also in the color and scale of these designs as used elsewhere in the room.

Thus the three fundamental qualities of decorating, namely, fitness, service and beauty, are all correlated and therefore built up together, and if constantly borne in mind will produce the livable interior which should be prized by all home owners.

Secession, Limited, the decorators, found that a careful and selective study of interior furnishings was necessary in the super-safe home because of its surface exposures of brick. They kept in mind that the home owner has brick to deal with in all exposed cubes of the room, that is, walls, ceilings and floors, and that their treatment must have a strong bearing upon the furnishings as a whole.

The house, quite unacademically planned in the shape of a hexagon, brought an interior with rooms of irregular shape and unusual angles. The problem of furnishing it offered two methods of solution.

Furniture could be built to fit into the odd spaces and angles entirely charming and appropriate for the particular house. Or, as in the solution adopted, all furnishings could be planned and fabricated so as to furnish the house delightfully and liveably and yet be applicable to any home of brick construction.

Secession, Limited, founded at the beginning of the "modern" trend in decoration and contemporary design in this country, has consistently carried on its interiors along these lines. Because of its character and design the super-safe house offered a fine opportunity to demonstrate the adaptability of modern furnishings in their more simple form to a dwelling suitable to a family of moderate means.

They were intrigued with the color and textures of the brick surfaces, with colors running through the entire range of shades, from light cream beige through salmon pinks to golden browns, marvelously softened by careful and selective laying. They decided to let the brick stand for itself on the main level and clearly express its delightful character as an interesting wall surface when left in its natural state. On the bedroom level a painted application was selected for one room, a wall paper surface for the other, that alternate modes of treating a fireproof surface could be shown.

By a clever and economical plan arrangement the architect has eliminated the basement and given over the greater part of the ground floor area to heating, laundry and storage, with a large *porté-cochère*. Entrance to the house is from this covered *porté-cochère* into a small entry, or vestibule with brick walls and

floor and an enclosed brick stairway leading to the main floor above.

The floor, stair treads and risers are all of common brick, of a selected darker shade than the walls, laid in a grey terrazzo. The walls, of a lighter range, are laid up in a white mortar. A small coat closet is to the left, and to the right a metal door leading to heater and laundry. The area being small very little furniture is required and, with the brick surfaces in mind and also that it is the outer hall and vestibule of the house, this is all fabricated in hammered wrought iron. It consists of a small console wall table, a modern arrangement of hat, coat and umbrella rack, with mirror, and a stair rail. The windows, being small, are left undraped. On the waxed floor and stairs is laid an inexpensive stair runner, or carpeting, in a selected plain design of black, maroon, and tan fiber, from the mills of Waite Rug Company of Oshkosh, Wisconsin.

It is upon arriving at the top of the stairs and entering the living room that the beauty and effectiveness of brick as a domestic interior treatment is apparent. Here, to harmonize with the lovely coloring of the walls and floors of slightly darker shades, well waxed and polished, a color scheme of light buff and dark brown for the cabinet pieces, with accents of

sienna and blue green for the furniture coverings, was decided upon. For the furniture two woods, a white maple with a little yellow ochre rubbed in, and fairly dark walnut, were selected.

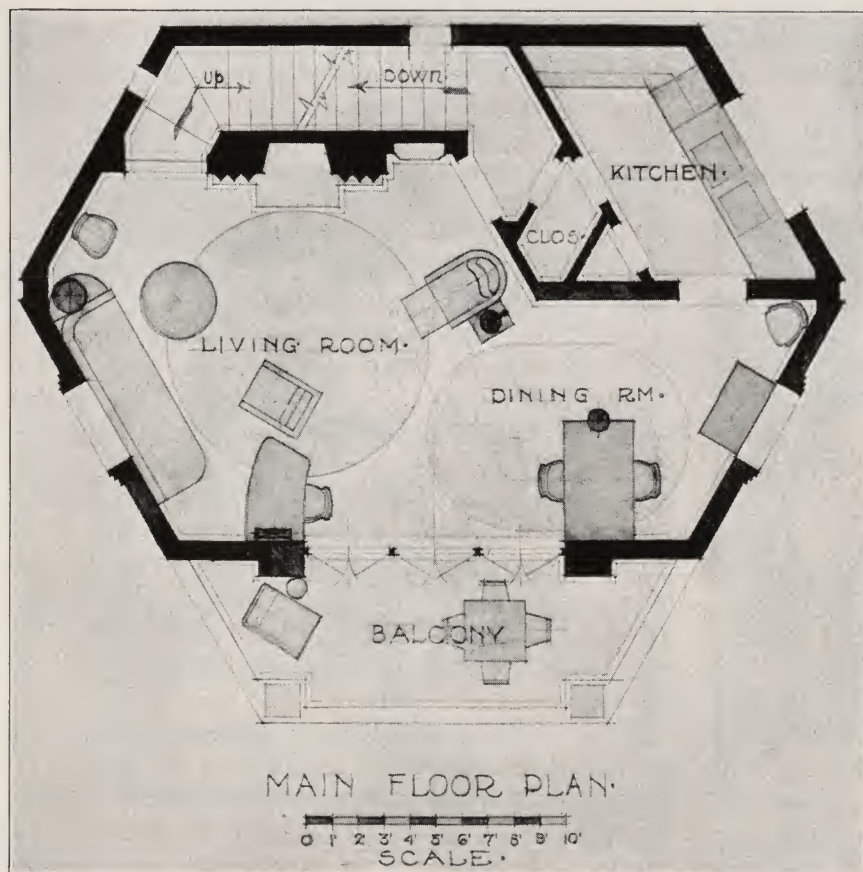
The living and dining rooms, being one, with no actual separation except by the placing of the furniture, the same color scheme was carried throughout. The house facing south that wall is taken up principally by a row of French doors leading to a delightful balcony built over the porté-cochere. On the east and west walls two large round windows admit additional light. The odd shape of the room facilitates an arrangement of the living room pieces to the center and west with the dining furniture at the east end. By a careful study of spaces and furnishings an easy and comfortable living arrangement was attained with no suggestion of overcrowding and with exceptional freedom of movement in a relatively small area.

The window sash and all trim being of metal, this was painted a light bronze Valdura to tone with the brick walls. The selection of fabrics to be used as draperies and upholstery was carefully studied and, because of its texture, wool was decided upon as being particularly appropriate to the brick setting. The color scheme of the furniture, a beige and dark brown, was carried out in these, but to give warmth and ac-

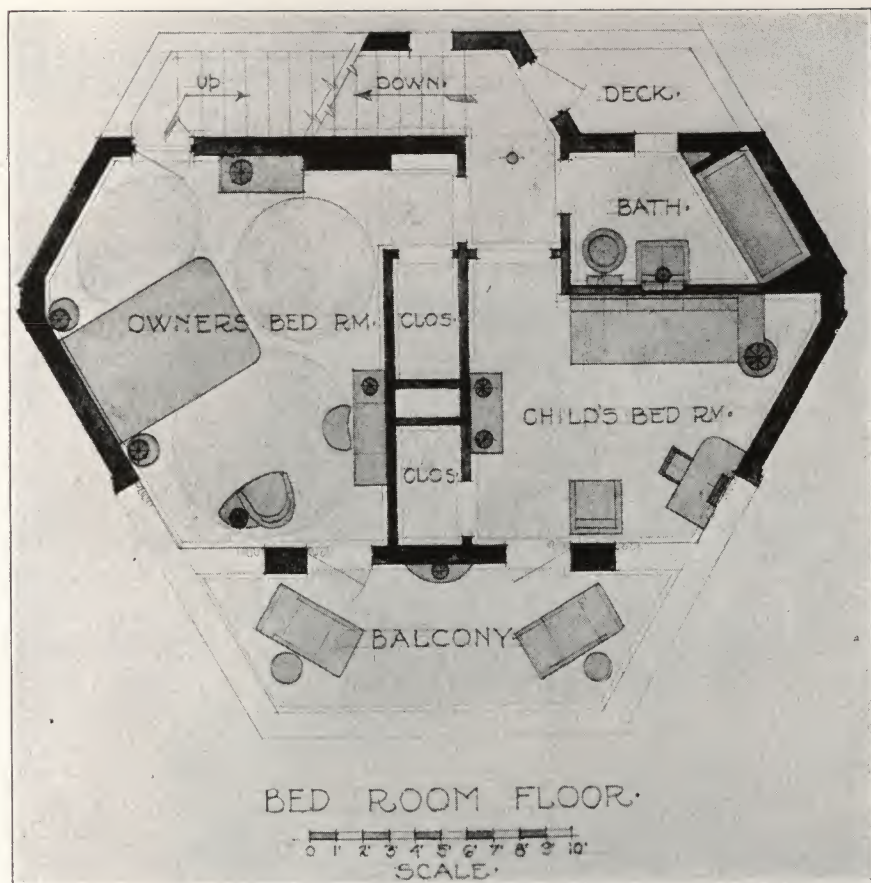
cent two additional colors, sienna and a blue green, were introduced, these two appearing in a straight color effect in the individual pieces of upholstered furniture. These fabrics were all woven on hand looms by the Guild of St. Anastasia Weavers in Chicago.

The upholstery and drapery weaves were made especially for the brick house and are the first products of this nature from these looms. The wool for the draperies was specially spun in the Continental Mills at Germantown, Philadelphia, and is Shetland in character, while the upholstery yarns were spun and dyed by the Caron Spinning Company, of Rochelle, Illinois, and are of a worsted material.

The selection of floor coverings presented a problem for careful thought. The brick floor, polished and waxed, is itself an interesting surface calling for rugs rather than carpeting. Because of the texture in the bricks rugs of plain material would appear more desirable, hence, from the factories of the J. Laskin &



These floor plan sketches show the arrangement of the furniture by rooms.



This floor plan sketch shows the arrangement of bed room furniture.

Sons, at Milwaukee, Wisconsin, two large sheepskin rugs with deep wool fringe, one circular and the other oval in shape, were made up in brown and beige.

The lighting, with the exception of a round ceiling fixture over the dining table, is supplied by floor and table lamps specially designed by Secession and fabricated by the Linster Studios, Chicago.

In order to preserve the simplicity in design of the large round windows no attempt was made at over-draping them, but, when it is desired to cut out the strong sunlight, a length of the woolen curtains, hung from ceiling to floor in the nearest corner of the room, can be drawn along a rod to hang directly in front of the window opening.

The second floor, reached by a brick stairway leading directly from the living room and carpeted with a Waite runner, consists of two bedrooms and bath. One, slightly larger than the other, is furnished as the owner's room, and here the color scheme is grey, yellow, black and silver. The walls, ceiling and floor of brick are treated in the following manner. The ceiling is covered with a plastic paint, grey white in color. The walls themselves are treated with a covering oil in horizontal bands of varying widths, shading from the ceiling color at the top through

the yellow greys to a grey black at the base. The floor is painted jet black, waxed and polished. The baseboards, trim and sash, all being metal, are treated with Valdura, a silver aluminum paint, to lighten the effect. This paint is used most effectively on all closet walls and ceilings, giving a clean and clear cut appearance.

The furniture in this room is all of birch, lacquered in two colors, yellow and green, and all specially designed along modern lines.

It consists of a bed, two side tables with reading lamps attached, a wardrobe chest, an easy chair with stool, and a dressing table fabricated in wood and glass worked out in the studios of the Torstenson Glass Company.

The draperies and bed covering are all of linens striped in soft greens and yellows and designed to carry out the color scheme of the room. Round and oval rugs, fabricated from grey wombat skins from the Laskin factories, are bordered in deep wool fringe in two shades of grey. All lighting is from table lamps in chrom-

mium, brushed steel and wood with white Belgian parchment shades, designed by Secession and fabricated in the Linster studios in Chicago.

The smaller bedroom is designed and furnished for a boy or girl of school age. To the brick walls of this room have been applied plasterboard papered with a light blue Salubra washable paper. The color scheme of this room is red, white and blue. The ceiling is treated with plastic paint in a chalk white, and all trim is painted with aluminum paint.

Over an ozite lining a specially designed cotton-tufted carpeting is laid in a plaid design of blue, black and white, made by the Waite factories in Oskosh, Wisconsin. The draperies, couch and pillow covers are of linens specially designed in plaids of the same color as the carpeting but in smaller scale. The furniture, consisting of couch-bed and end table, study desk, chair, and wardrobe chest, is all of birch, lacquered in red and white and all lighted with lamps of wood with white Belgian parchment shades. Throughout the house shades from the Western Shade Cloth Company, of Chicago, have been used.

The color scheme in the bathroom is a combination of soft pink and light green which, as the room is small, tends to create an idea of roominess.



Yeager & Krause, Architects

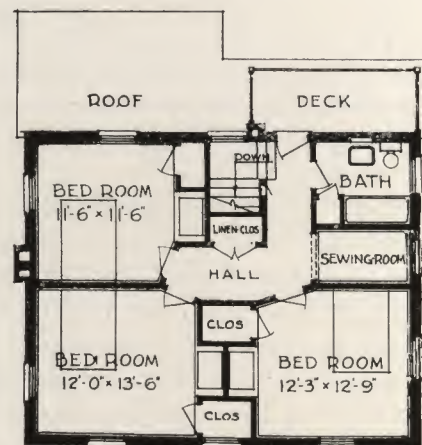
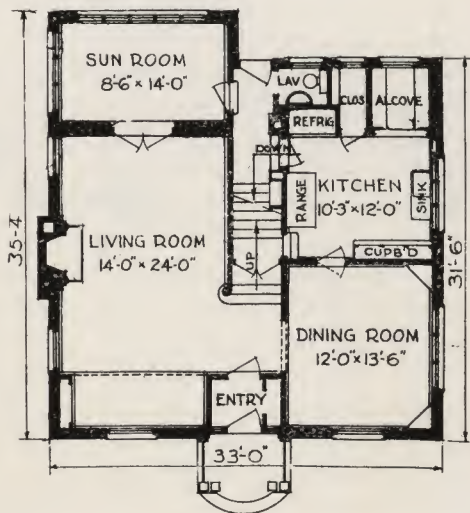
The WAUBAY

Design A653

Six Rooms with Dining Alcove and Sun Porch

28,640 Cubic Feet

Complete Working Drawings and Specifications \$10
Additional Sets \$1 Each



Brick Interiors In Natural Finish Are Winning Favor

INTERIOR finish in natural brickwork was not initiated by the super-safe brick house at the Century of Progress Exposition. It had for many years been in use, generally in the rough. Probably the idea of finishing smoothly the floors and walls did begin there, just as did the utilization of the reinforced brick masonry type of construction in small homes. But neither will end there.

Here and there natural brick interior walls have been used, dating from Colonial days. But perhaps it was California, adopting the idea from that old Spanish custom of rough coating the interior adobe walls of their early homes with clay mud, that first really took to the natural brick finish. Many of the homes of the movie stars of Beverly Hills feature it, and one of Hollywood's leading movie houses is finished in the same way. But in neither case were the floors of brick. The brick floor came with reinforced brickwork which made it possible.

One of the most attractive examples of brick interior finish in the Chicago district is the home of Dr. J. B. Ross, at Crystal Lake, Illinois, not far from



Photo by Ravenswood Photo Service.

Dark, over-burned clinkers were interspersed for contrast in the fireplace.

Chicago. This house is built of the same kind of brick that went into the exhibition house at the Fair. The exterior walls of the house were of skintled brickwork of the mortar over-hang type. The interior walls were finished with a lightly raked joint which brought out sharply the lines and coloring of the brick. The ceilings were heavily beamed and the floors of hardwood. The living room fireplace was massively built of brick in the rough and the entire ensemble appealingly beautiful.

Making the structural unit, or wall, the finishing medium both for exterior and interior, and virtually completing the task in one operation, as the brick-mason does in laying up the wall, offers a decided economy in addition to its possibilities of beauty. Lathing and plastering alone in the average small home represents about 10 per cent of its total cost.

Some famous buildings having interior walls of exposed brickwork include Grauman's Chinese theatre, Hollywood; Mission Inn, Riverside, Cal., and the Cleveland Art Museum.



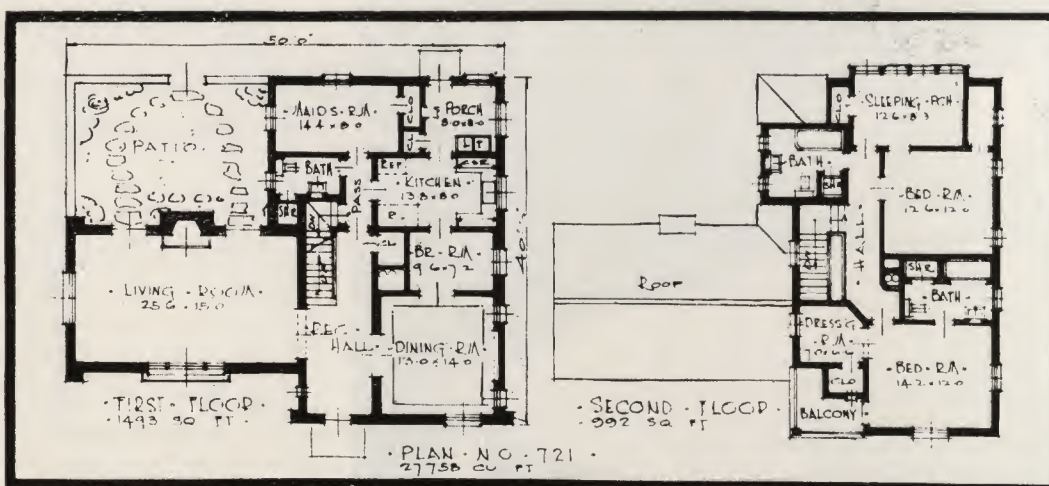
Beyond the living room with its atmosphere of comfort is a cheery sun room.



The SAN FRANCISCO

This exceptional home would easily fit into any setting. A background of woods or heavy shrubbery would be fine. Both perspective and plan tell their stories eloquently.

Plans and Specifications, \$18

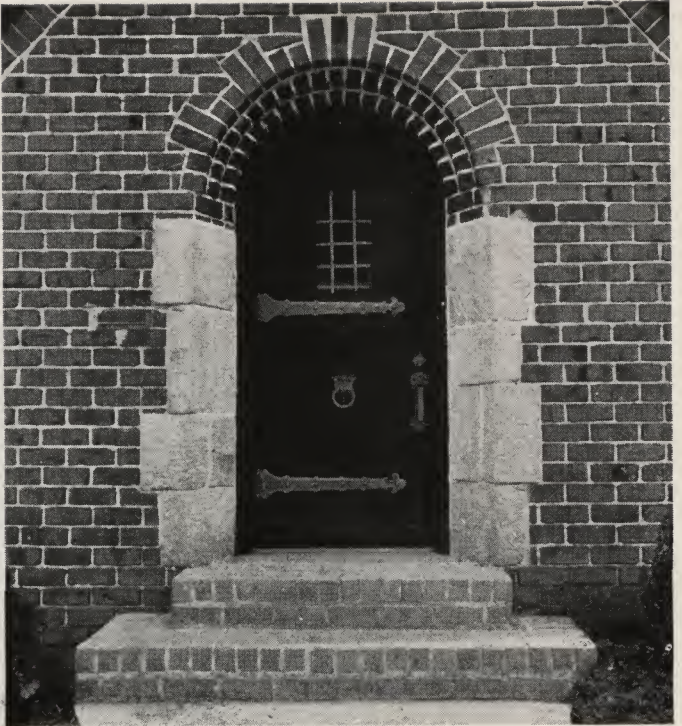


Doorways and Doors

May Increase Both

Beauty and Safety

ATTRACTIVE doorways are just as essential to the exterior appeal of a house as metal doors are to its firesafety within. Brick houses offer an exceptional opportunity for fine entrance treatments in natural masonry. Nothing so completely defeats the purpose of good designing as a doorway out of keeping with the general ensemble. And it is surprising how often this feature is under valued. The illustrations are rather fine examples of appropriate handling of this important problem.



A. J. Daidone, Architect, N. Y.

Heavy strap hinges add just the needed touch to this unusual setting.

One feature of the super-safe house at the Exposition which fit into the interior finish with complete harmony and occasioned much approving comment was the metal doors, metal trim, and steel sash. The doors were sound proof, manufactured by Irving Hamlin, of Evanston, Illinois, and so made that when closed they virtually hermetically sealed the openings. Such a door is especially effective and desirable for bath rooms, dens and recreation rooms. And the smaller the house or apartment the more they are needed. In the bath one may splash to his heart's content at midnight and the house remains undisturbed. The same applies to recreation or children's play rooms, both noisy at times.

These doors are both mechanically perfect and ingeniously constructed. Doors to be effectively sound resisting must be thick, heavy, stiff, and their substance must be of materials of varying densities and differing susceptibilities to sound vibration and absorption. Moreover the four cracks at floor and jambs must be hermetically sealed, and with force, and the door held firmly in its frame. The interior insulation is of asbestos board and sheet steel, which affords the maximum of both sound retardation and fire protection. With its sound-proof brick partitions and this type of door the super-safe house became the last word in quietness.



Van Pelt, Thompson & Churchill, Architects, N. Y.

A very unusual doorway in which every detail harmonizes perfectly.



Henry Fitzgerald, Architect

The MEDFORD

Design A75C

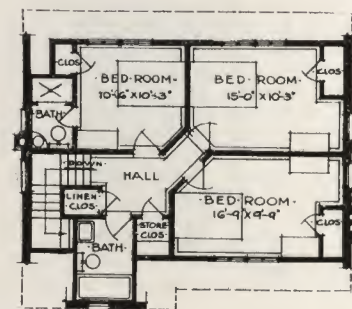
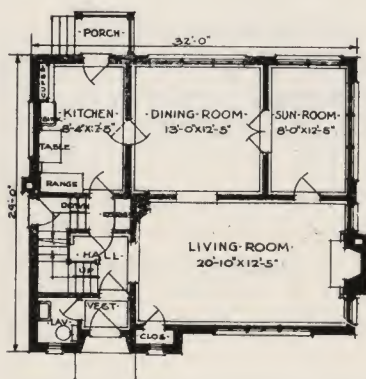
A Six Room House with a Sun Room



24,876 Cubic Feet



Complete Working Drawings
and Specifications \$10
Additional Sets \$1 Each



Windows and Shades

Either Make or Mar

Exterior Appearance

NOTHING in the construction and interior decoration of a house exerts a greater influence upon its appearance than do windows and window shades. They either make it appealing or repellant. And whether you have the one effect or the other makes little difference in the cost, for the appropriate is but little more expensive than the other.

In the days of the "Roaring Nineties" when upper Fifth Avenue was the center of the homes of the Four Hundred in New York society no sight-seeing trip to the metropolis was quite complete without a bus ride through that stretch of the millionaires' colony. The price of the window decorations alone would have been sufficient to permit one of more than moderate desires to have retired from active business effort for life. It was a real treat to see them.

Always remember that in furnishing your windows you are dealing with the most conspicuous part of the home, occupying approximately one-sixth of the total exterior wall surface. It is the only part of your furnishing visible from the street and a dominating feature within. Inevitably the windows will have a controlling influence upon the final appearance regardless of what furniture you may use.

You must have some dependable means of light control at these open spaces to protect the eyes with properly modulated daylight, to exclude your home life at night from prying eyes, keep the temperature of the room regulated and to protect the interior furnishings from fading under the blistering summer sunlight. The thing which does all this and at the same time contributes its share toward the tasteful decorating of the home is the window shades. Their color does a double duty in keeping the windows in harmony with interior decoration and maintaining uniformity to the exterior trim.

For the windows of the super-safe house was selected Cameo shade cloth with soft pastel colorings

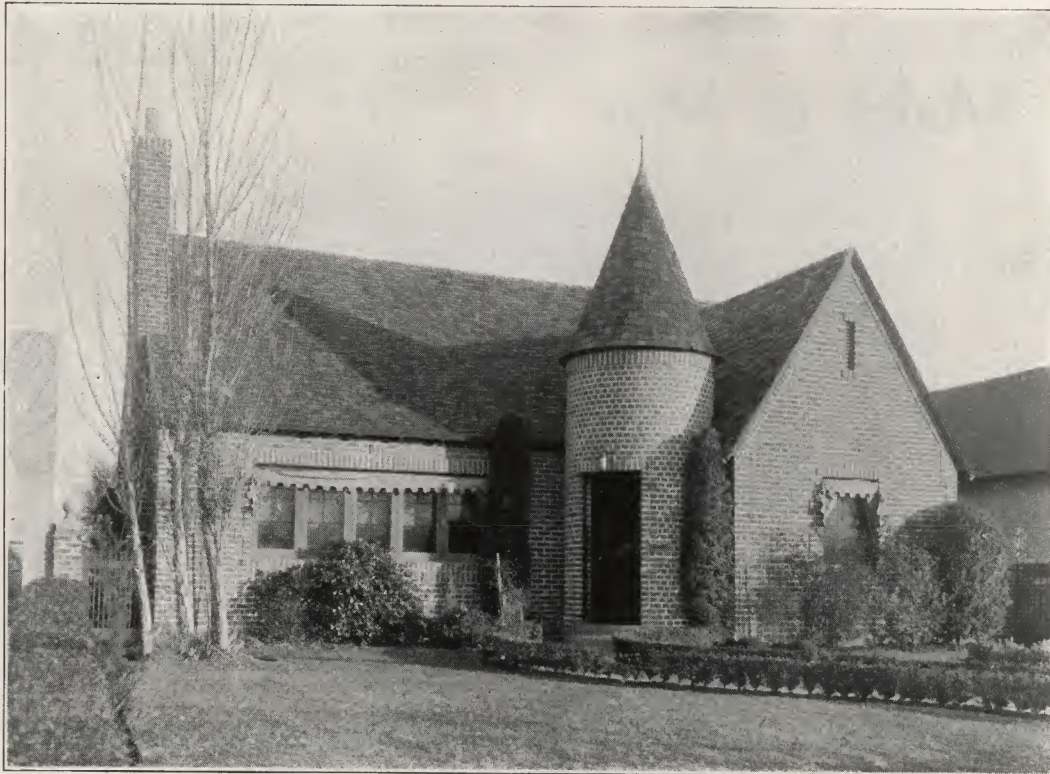
in delicate over tones, further enhanced by a misty cloud design permanently embossed in the fabric and equally effective in either transmitted or reflected light. Cameo is one of the recent creations that has marked the progress toward greater decorative qualities in window shades. It is manufactured by the Western Shade Cloth Company, of Chicago.

Shades should not only be attractive but practical as well, for they must be kept as immaculately clean as the windows, curtains and drapes. Dust accumulation, soot and finger marks that are inescapable can easily be removed from this shade by washing with soap and water. Moreover there is no danger of the wrinkling that so often follows in some other types. In achieving the distinctive and decorative features of this shade its manufacturers have sacrificed none of the wearing qualities typical of a good shade fabric. They will wear for years. Upon application samples of this and many others of their quality shades may be secured without charge.

Satisfactory service demands the same discrimination in the type of windows you install. Casement windows are best. This type was used in the super-safe home. They fit into the safety scheme while meeting every other window demand. Windows of this type are to be had in almost any weight and design, made of bronze, aluminum, or the more commonly used rust-resisting steel. With the rapid expansion in the use of casement windows in residential construction during the last ten years new standards of excellence attained insure satisfaction.

These particular windows were constructed with very narrow lines and with the metal so distributed as to give maximum strength and permanence. The muntin bars are slender so as to allow the greatest possible amount of light to enter through the window and to reduce condensation to a minimum. This is particularly impressive when the actual area of metal is compared with the more cumbersome members of wood windows. Also metal windows allow no possibility of warping, expansion, contraction or other distortions due to weathering.

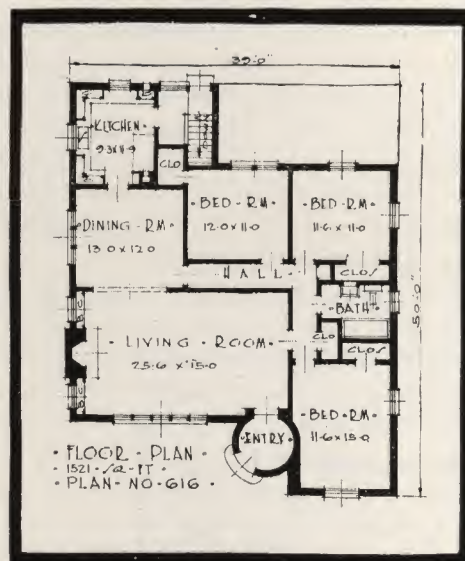
Casement windows swing either in or out and for a time presented an intricate screening problem. This has been satisfactorily solved however. Rolcreens, used in the super-safe house, are of the best. They roll up automatically at the touch of a finger on the principle of a window shade. When the casement is shut they are rolled up and invisible, permitting the maximum of vision and sunlight. Only when the window is open and they screen the opening are they in sight. They permit easy access to awnings, flower boxes or the windows for washing, and do not have to be taken down for the winter months.



The JAMES

Here the designer has shown us an exterior of much merit in composition and has pictured it most charmingly. The walls are of brick in various soft, mellow, red tones, laid in a white mortar. The roof is of brown fire resistant shingles, staggered.

Plans and Specifications,
\$12



Air Conditioning Insures Comfort And Better Health

AIR CONDITIONING is a comparatively new development in house construction and something about which the average prospective builder knows little or nothing. Fundamentally it is for your comfort and health. In principle it cools and dries the air supply in summer and warms and moistens the air in winter, in each case to the point of humidity that is best suited to the insurance against not only discomfort but respiratory diseases.

Recently the scientists have been giving attention to air conditioning and probably soon there may be some interesting reports from them that may or may not affect existing conditioning systems. It is the claim of air conditioning authorities that in winter the average residence requires the addition of from 15 to 24 gallons of water to the air daily to obtain the proper relative humidity, which should be between 30 and 40 per cent. How many homes get it?

Probably you will remember that in the days of your childhood it was your mother's custom to keep a vessel of water sitting in some one of the lower rooms that it might be evaporated by the heated air during the winter season. It was kept filled religiously. She knew that the heated dry air was as conducive to colds and throat troubles as over-exposure itself. But that has become a lost custom, at least in most homes of today.

Cool, dry air in summer, on the other hand, enables the body to dissipate its heat easily which is one way of relieving excessive heart strain. Physical energy is increased through sleeping soundly and this is more readily possible in summer when the atmosphere is cool. It isn't necessary to dwell upon the exhaustion which follows the incessant turning and tossing on a hot, close, mid-summer night.

A complete air conditioning system will provide air in the form most conducive to the health of the occupants of the house. Moisture can be added in winter and subtracted in summer. So, too, temperatures can be raised or lowered. Dirt, dust and smoke may be

eliminated and the air kept in motion at the proper velocity without drafts. Any one of several systems will satisfactorily perform this service.

One method of humidifying the air in winter is to pass it through a mist of water from a spray nozzle or over a wet surface. Boiling water into steam and permitting it to escape into the room is another method. The need of this humidity is often apparent to the householder in the shrinkage of the woodwork of the interior trim to a point where the paint line shows a contraction of an eighth of an inch or more. This usually disappears in summer when opened windows let in the damper air and the woodwork swells to its normal condition.

Air is cooled likewise in several ways. One is to pass it through a finned coil that is kept at a low temperature either by a refrigerant or by ice water circulating through it. Another draws it through a mist of water at a very low temperature. The mist not only cools but it removes the dust from the air. This is on the principle of the summer shower after which the air seems delightfully clean and pure, for every rain-drop has held in its core a particle of dust or soot picked up on its downward course.

Filters made of cellulose material, Spanish moss, copper wool or spun glass will remove dirt and dust from the air as it is drawn through them. This filter material may be cleaned when it has become dirty or it may be thrown away and replaced at low cost.

The super-safe house at the Exposition was equipped with air conditioning apparatus manufactured by the Ilg Electric Ventilating Company, of Chicago. Living and dining room were supplied with cooled and dehumidified air by a refrigerating machine located in the laundry room on the ground level. It supplied refrigerant to a coil in a walnut finished cabinet set on the floor in the living room. Powerful, quiet-operating blower fans force air over the coil, cooling and dehumidifying the air and distributing it throughout the rooms. A concealed pipe in the wall conveys the water taken from the air to the sewer drain. Its presence normally would not be noticed.

An Ilgair ventilator is a feature of the kitchen. This is a 12-inch exhaust fan mounted on a panel at the top of the window. Pulling a chain opens an outside vent and automatically starts the fan which expels all kitchen odors. Release of the chain automatically stops the fan, closing the window. In the master bedroom a spot cooler is located in the closet with a grilled opening in the wall through which the air is supplied. In the bathroom the unit is mounted in a cabinet in the wall. An Ilgattic system of heat prevention and ventilation installed on the roof draws the air through grilles in the ceiling of the sleeping rooms.

Steel for Strength Has Definite Place In Home Building

TENDENCIES in residence construction are veering more and more to the firesafe types. With an alarming percentage of our annual half billion dollar fire loss apportioned to homes, with an even greater percentage of the annual life toll of 10,000 souls registered against the dwelling, and a growing desire for a greater sense of security, the fire-proof house seems destined eventually to predominate as the choice of all prudent home builders.

The super-safe home, without an ounce of combustible material in all its make-up, offered interested prospective builders the best demonstration of an absolutely fireproof house ever built in America. Reinforced brickwork seems to offer a solution of the problem of safety while at the same time fitting effectively into any type of architecture. It is not confined in its application to the modernesque. It is just as adequate in any other.

Steel is coming more and more into use in house construction, not only for reinforcement as demonstrated in the super-safe house, but to replace wood superstructure in general. Recently in Cleveland several houses have been built of brick, tile and steel that approximated the fire-safety of the super-safe house, in all features save the roof where less resistant materials were used.

These were of what perhaps may best be termed skyscraper construction. The entire frame work was of arc welded or bolted steel, both systems having been used for the purpose of comparing costs. The steel girders, beams and joists were all cut to length at the mill, ready for assembling. They consisted mostly of 3-inch light weight channels and both 6-inch and 8-inch I-beams. The 3-inch units were used in the sidewall, partition and roof framework, the heavier beams for carrying the floor joists.

Wall construction consisted of an outer shell of brick and an inner shell of brick on edge or 2-inch hollow tile. The brick was reinforced laterally with steel rods and tied to the studs with specially designed steel clips which wedge firmly into the channel flanges. When tile was used it was laid with the voids alternately vertical and horizontal for the purpose of providing individual dead air spaces in each tile. Between outer and inner shell of brick or tile was a 3-inch dead air space securely shut off at both top and bottom. This treatment provided, in effect, a double insulation. Floors were of tile, reinforced. Plastering was direct upon the inner wall, without furring, a very substantial economy.

This type of construction, like reinforced brick masonry, is adaptable to any type of architecture. In both construction types steel plays an important part, both in adding to the strength of walls and floors and in removing fire menace by replacing the usual wooden members in the superstructure. These steel units have been standardized and can be ordered from the mills cut to any desired lengths. Difference in cost between steel and wood is surprisingly small.

Lately there has been considerable discussion of all steel construction. Its promoters make no specific claims for low costs, or for its being or becoming ever, successfully competitive with other types. Such construction would have strength and permanence but its problem is exterior appearance.



Steel replaced wood entirely in the superstructure of this residence.

Heating and Plumbing Are Vital Factors in Your Living Comfort

HEATING the house is a subject that is always of interest to the home owner for the annual fuel bills are usually worth while regardless of the type of heating system one may have in his house. Brick houses insure their owners a distinct saving in this respect for they are easier heated than other types. This economy over a period of years is worth considering in selecting the kind of house you will build. Masonry walls have a very definite and acknowledged advantage over wood walls with respect to heat losses.

Most of the heat loss in any house is through the cracks around doors and windows and through the attic, ceiling and roof. But there is a percentage of loss through the walls as well. This latter is comparatively small in the case of brick masonry. Wood walls are insulated to reduce this heat leakage but scientific authorities concede to the brick wall a very decided saving in the fuel costs necessary to overcome these relative heat losses.

Present standard heating systems are steam, vapor, hot water and warm air. All are used extensively so there is no occasion to go specifically into their respective merits. After all it is a matter usually governed by preference and one's financial ability to install the cheaper or the more expensive system, considering as well the size and type of the house. Suffice it to say that all of them, under varying conditions, have given and are giving satisfactory service to their owners.

Fuels are generally confined to coal, oil and gas. Other by-products of coal are used but not so extensively. Coal furnaces or boilers are usually fired by hand although there are some very efficient automatic stokers, thermostatically controlled, which do the job satisfactorily. Gas needs no handling beyond thermostatic control and is perhaps the easiest of them all to handle. Oil is fed automatically, also under control. In point of cost they probably rank in the order named, coal being cheapest.

More and more interesting and effective controls are being invented to improve heating installation. In most of the systems it is possible to regulate the general heat of the house very effectively, but with some of the new contrivances one may have any degree of temperature he may desire in any room at any time and for stated periods. Heating, itself, is pretty well mastered and its control is fast being reduced to a science as well.

Heating and plumbing go rather closely hand in hand although the steam fitter usually is called in for the heating end of it. Wrought iron pipes, extra heavy, are usually employed in the heating systems where water or steam are the mediums. But for the other plumbing in the house it has been proved by experience, sometimes sad, that the use of brass piping is the more advisable. It is not given to rusting out or coloring the water from the process of rusting, and it lasts indefinitely.

Plumbing too has made tremendous advances in the last quarter century and the appliances in the homes built that long ago are quite out of date today. A glance through any modern house, while it is under construction, will quickly discover these improvements. Any bathroom or kitchen in an up-to-date home will show a contrast that is really startling.

It is economy in the long run to install the best you can afford in both heating and plumbing when you build. One should always keep in mind the possibility of having some day to sell the house, possibly on short notice. It is then that the real value of having first class equipment is best realized, for prospective buyers, whether they have been used to them or not, want everything up-to-the-minute and their first step is to look for just that.

No part of the construction will give you more annoyance or cost you more to repair or replace than your plumbing, especially the concealed pipes, once they begin to deteriorate. You will need have only one experience with defective pipes in the wee hours of a zero winter morning to convince you for all time that the best is the cheapest and that overstressing initial cost is sometimes the worst of poor judgment.

Most folk build the house they can afford but do not always, through inexperience or otherwise, properly evaluate the essentials to convenience and comfort. These should receive first consideration. The expense of dolling up can better come later.

Both kitchen and bathroom in the super-safe house were ideally equipped. The first by the International Nickel Company, New York City, the latter by the Eljer Company, of Ford City, Pa. Both are leaders in their respective fields.

Too Few Closets Is a Common Fault In Most Houses

BUILD plenty of closets in your house if you expect your better half to be entirely delighted with it. For no woman ever complained of too much closet room and few homes have enough. It is a point that too frequently is overlooked, while often the closets provided are small and cramped.

The closets in the super-safe house were necessarily not over-large. The size of the house prohibited it. But they were a fine example, for all that, of what can be provided in convenience and order in even the smallest closet. All were equipped with "K-Veniences," handy and easily installed appliances made by the Knapp & Voght Manufacturing Company, of Grand Rapids, Michigan.

These consist of clothes carriers, metal telescoping rods which are attached to the wooden strip in the closets to which usually merely hooks are attached. Each set has its individual hangers for either suits or dresses, which permit the garments to hang naturally without wrinkling. An ordinary closet will accommodate at least three of them.



Simply a heart's delight.

Then there are garment brackets, trouser holders, and hat holders that may be fitted in in odd spaces, together with closet rods, necktie racks and shoe holders that may be attached to the inner side of the closet doors. The illustration tells the story in a most convincing manner, but it will be only after you have enjoyed these conveniences that you will appreciate what you've been missing.

Use Only Firesafe Roofs With Brick Construction

EVOLUTINARY as the super-safe house is probably the feature that attracted most attention, barring always its modernesque architecture, was its roof of reinforced brickwork. A roof that to all appearances might be a grillroom floor is altogether a novelty. Such a roof, capable of supporting five or six times as much weight per square foot as is required by most city building codes, proof against the most violent rainstorms, yet attractive to the eye and comfortable to the feet, is little short of the miraculous in construction.

This type of roof would go safely through a conflagration as severe as that of the great Chicago fire of 1871. There is no more about it to burn than there is about any other part of the house. Unfortunately it is not suited to any of the slanting types of roof elevation. Its use will probably be confined to structures where flat roofs are either desired or are necessary. It is intended, primarily, for safety, but secondly for the purposes to which this one was devoted, the pro-

viding of a roof garden otherwise not possible on a small home.

However, there are many other types of fire resistive roofs that will go well with brick construction. The ever reliable Spanish tile of burned clay is both lasting and beautiful, and there are a wide variety of shapes, some of which however are not truly Spanish. Then there are the asbestos shingles which of all the composition shingles are perhaps the best. The variety of composition materials for roofing is altogether too wide to attempt to enumerate the individual types or to analyze their respective effectiveness. But one will not go wrong by adopting either some burned clay tile or a standard asbestos shingle.

Slate roofs harmonize delightfully with brick and they may be had in a number of attractive styles and appealing colors. They too are long lived, non-inflammable, and considering the service they give are not really expensive in the long run. A combination of slate roof, brick exterior walls and decorations, and window sash of metal, is difficult to surpass.

Bathrooms of Today Vary in Color Scheme As Much as in Cost

THE ONE PLACE in the house where the wife is exacting often to the point of fastidiousness is the bathroom. There, always, everything must be immaculate. Other rooms may be neglected occasionally, dusting may be given a hasty once over, the beds may under stress remain unmade until noon, the rug may not be sent to the cleaner's for another week, but the bath tub must show no discoloration, the tile must be kept glistening, and nothing must ever be awry. Most women are alike in this.

Color has come to play a more and more important part in the bathroom and women's love for the bright and vivid colorings of modern bath equipment may be largely responsible for what most men are prone to term a weakness. But it isn't that at all. And deep down in the husband's heart he knows that he is just as foolish about it all as is his wife. But he will not confess it. He must play his part.

Today the tub, the commode, the lavatory, the foot bath and even the tiles may be had in almost any color one admires and prefers. Both quality and design in bathroom equipment are constantly being improved. New materials are being developed and some of the

fittings are really extravagant in design as well as in price. You can spend a small fortune in your bathroom if you desire, yet it is still possible to have it in exquisite taste and beauty for a comparatively moderate financial outlay.

A most attractive material, Carrara, was used in wainscoting the bathroom and kitchen of the super-safe home at the Exposition. It excited much enthusiastic admiration for it has the virtue of combining beauty with permanence. The art of the ages produced Carrara and throughout long years of service its beauty will endure unimpaired.

This material fits admirably into any color scheme for the decoration of the bathroom, kitchen, foyer or breakfast nook. It is available in a line of plain delightfully varying colors. One may choose from ivory, jade, gray, black and white.

Because of its polished, flint-like surface it is easily cleaned, sanitary, and a most practical and economical wall material. Experience has proved that it neither dulls, crazes, fades nor develops discolorations. It withstands the ravages of time and wear and will retain its color and rich glossiness far beyond the extreme life of the average building in which it may be installed. Carrara Structural Glass is manufactured by the Pittsburgh Plate Glass Co., Pittsburgh, Pa.



Lighting and Electric Wiring are Delicate Problems in the Home

LIGHTING and electric wiring are two of the most important features in your construction and decorative problem. The one because it combines comfort, convenience and ornament, the other from the standpoint of safety. Many a house has gone up in smoke by reason of defective wiring.

The tendency in recent years has been toward softer light effects in living and dining rooms, the brighter lighting being reserved for the sleeping rooms where, in the average small home, one is compelled to do his dressing. More and more also the side wall lighting fixtures are being used, although the indirect system is still good.

Fixtures are more ornamental, lighter and more delicately beautiful in their design, and usually, in the better grades, of a metal alloy which retains its

luster without dulling through years of use. A wide variety of bulbs are provided to fit any color scheme or to meet particularly desired effects.

In the fireproof type of house the wiring is carried to contact points either through conduits in the walls, or concealed, yet more easily reached, beneath the metal trim. The metal trim in the super-safe house, supplied by the Knapp Brothers' Manufacturing Company, of 605 W. Washington Street, Chicago, serves this double purpose. While providing a non-inflammable finish at floor and ceiling lines and around doors it is also a system of raceways for distributing electrical wires to lights and convenience outlets, and for telephone wires to connections in every room. Easily removable in sections it permits changes in outlet locations with a minimum of effort.

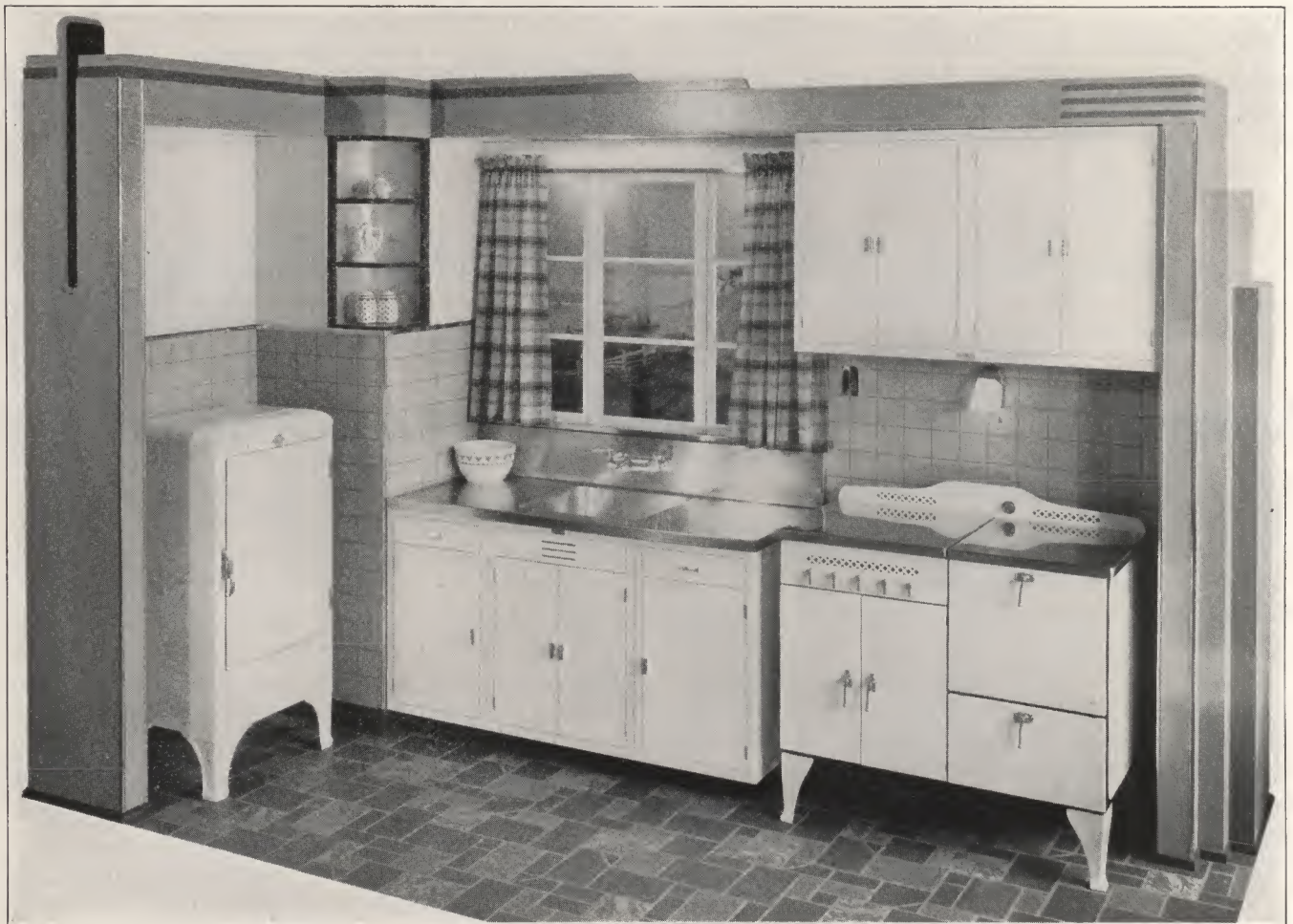
Kitchens No Longer Are the Bugbears of A Woman's Life

KITCHENS of the modern variety are vastly different from those of our youth. Where mother was compelled to do most of her work by hand the servants today are aided by a wide assortment of labor saving devices operated by electricity and doing everything from beating an egg to washing the dishes. Moreover these are either made of or

finished with metal that is stainless and may be washed, where it is possible to hold them under a faucet, by merely turning on the hot water.

In mother's day of first learning how to keep the house in order the kitchen was the bane of her life. If there was a sink it was constantly becoming discolored. The cabinet, if she was fortunate in having one, was built of wood and was another source of constant grief. The stove was usually of poorly finished cast iron and had to be polished constantly. Almost every article of kitchen equipment required burnishing every time it was used.

Today practically everything may be had of stainless metal, easy to take care of and always bright and shining. The International Nickel Company, Inc., alone makes a total of 53 different domestic items of their marvelous Monel Metal that can be kept in perfect condition with minimum effort. It hasn't merely a surface finish or plating, it is the same all the way through. Wear makes it all the brighter. The equipment in the super-safe house would astonish you by its moderate cost.



This kitchen outfit which would delight any housewife is really surprisingly inexpensive.



MONEL METAL *the* MARK of MODERN *kitchens*

ARCHITECTS and home economics experts have joined hands in today's movement for scientifically planned kitchens. As a result of their enlightened cooperation, kitchen work today is greatly reduced and many household tasks that were once dreaded have been made easy and pleasant.

No small part of the credit for this happy result goes to Monel Metal. Absolutely rust-proof, resistant to corrosion, strong and tough—Monel Metal is a solid metal which has no mere surface finish that can be worn off, chipped, cracked, or marred. Moreover, its gleaming surfaces are easily kept clean and sanitary.

For these reasons, you find Monel Metal sinks, combined with Monel Metal cabinet tops in one, continuous working surface—and Monel Metal range tops on gas and electric ranges carry the idea still further. Also you see Monel Metal used as architectural trim around

today's popular flush ceiling light panels, and as push plates and kick plates on doors.

The soft, silvery lustre of Monel Metal has brought new beauty to modern kitchens. It harmonizes with any color scheme, its gleaming surfaces reflect gaily tinted walls, and pick up color accents from draperies and accessories.

Monel Metal **standardized** units for modern kitchens include kitchen sinks, cabinet sinks, cabinet tops, table tops, back splashes and flat rim bowls—53

in all, ranging in price from \$27 to \$195. There are many other items of additional Monel Metal household appliances—ranges (complete with Monel Metal tops, burner tops, ovens, etc.), refrigerators (with Monel Metal trim and accessories), hot water tanks and automatic water heaters, dishwasher sinks and washing machines.

Fully illustrated and descriptive literature will gladly be sent on request. Be sure to mention the kinds of Monel Metal equipment that interests you. Address your request to:

THE INTERNATIONAL
NICKEL COMPANY INC.
67 Wall St., New York, N. Y.



Monel Metal is a registered trade-mark applied to an alloy containing approximately two-thirds nickel and one-third copper. Monel Metal is mined, smelted, refined, rolled and marketed solely by International Nickel.



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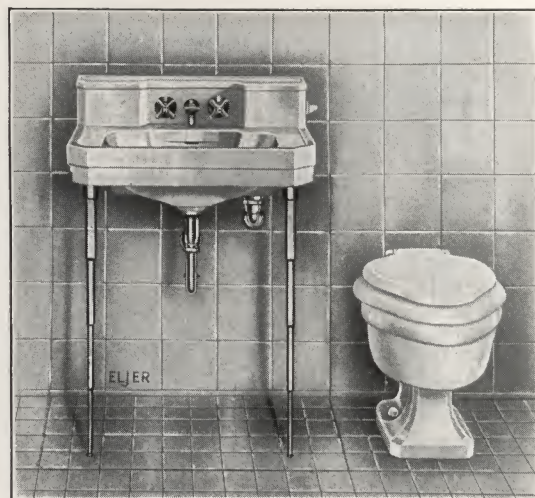


Plate B-3106—Right Hand

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The ELJER-DRESSETTE

MODERN TO THE MOMENT—STYLED FOR TOMORROW

A Century of Progress has served to show that many time honored ideas have been swept into the scrap heap of obsolescence. When we envision the progress of the past one hundred years we realize how necessary it is that we, in our time, must look into the future and build not only to meet today's needs but the changing conditions of the years to come. So rapid is the March of Time that only the most progressive methods and the most modern materials and equipment can hope to survive the developments of even one generation.

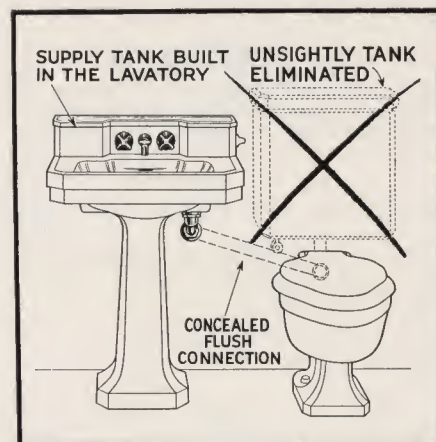
The Eljer-Dressette is a new and improved fixture which embodies the best mechanical details in a modern and pleasing design which will endure and be in good taste for many years. It adds a note of distinction to any bathroom.

Modern in every respect, compact and space saving, yet providing ample convenience, it is suitable for the luxurious bathroom or the modest one. The price is surprisingly reasonable.

Consider the Dressette's many advantages, and that you are building for the future as well as the present. Can you afford to accept or be satisfied with less than it offers?

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